RICKER LIBRARY ARCHITECTURE
UNIVERSITY OF ILLINOIS

The Builder

INCORPORATING ARCHITECTURE & THE BRITISH ARCHITECT

Vol. CC. March 3rd 1961 No. 6146

Published from 'The Builder' House, 4 Catherine-street, Aldwych, London, WC2. Telephones: Temple Bar 6251-4.

Annual subscription rate: £4. Special rate for Students following an approved architectural or technical course: 30s. Single copies (including back numbers, where available, up to 12 months old) 1s. 6d. (post paid 2s.). Indices free on application.

Principal Contents

ILLUSTRATIONS

PAGE

393 Open-plan LCC Housing, Shoreditch. By Hubert Bennett
396 O'Keefe Concert Hall, Toronto. By Earle C. Morgan & Page & Steele (Toronto) and Eggers & Higgins (New York)
400 Radial Portal-Frame Structure for Motor Showroom. By William H. Arend & Son
403 Headquarters Building, EC1, for British Road Services. By L. Robinson

ARTICLES

392 The Architectural Association: Wide Administrative Changes
394 Designing for Television: Some Problems and Opportunities
395 Competition News: County Hall, Monmouthshire
402 Letters to the Editor
402 Hospital Building Notes: Three New Issues
407 More Everyday Things—31. By Arthur W. Kenyon, CBE
408 The Palace of Whitehall: Discovery of Tudor Buildings
410 Training for Site Management: Discussions at LMBA Course
412 Firm Price Tendering: NJCC's Statement and NFBTE's Comments
413 Federation of Master Builders: House Builders' Committee Formed
416 Subsidies Under the New Housing Bill
417 Cost Research: Work and Trends of RICS Panel
419 Work Study for the Medium-sized Builder: By L. V. Merlin

Leading Articles

Cost Research and the Future

THE SURVEYING PROFESSION cannot be said to have been quick in the realisation that research is a necessary aid to progress in any sphere of modern life. Although some research was being undertaken by Chartered Surveyors on an individual or group basis, it was not until 1956 that the RICS formed its Cost Research Panel, its objects being to promote research into the cost of building, a sphere in which the quantity surveyor is increasingly being expected to have expert knowledge. Now, after five years, the Panel has prepared a progress report, and it is of interest to take stock of its achievements and consider its future potential.

A large amount of statistical research has been carried out in connection with the cost of two-storey housing and multi-storey flats. Material support has been given in the development of techniques for Cost Planning and the encouragement of the use of these techniques by quantity surveyors. The Panel has initiated research groups throughout the Branches of the RICS to enable a wide range of work to be carried out and to broaden the interest in research generally. In a short period, in fact, a very considerable effort has been made and much important work done. What impact, then, has this effort had upon the practising quantity surveyor and architect?

It has required an intensive and continuous campaign to bring an awareness to the quantity surveyor of the vital need for cost planning. In spite of combined efforts by the RIBA and RICS, it is disappointing that architects, who have so much to gain by the introduction of cost planning, are not widely taking advantage of the service now eagerly offered by quantity surveyors.

To inspire confidence, statistical research needs to be based upon a very large volume of data if it is to eliminate the effects of abnormal conditions. One wonders whether the Cost Research Panel could have obtained sufficient data to provide sound results in certain of its subjects? Nevertheless, papers of considerable value have been produced in relation to housing costs which have evoked the interest of those architects and surveyors dealing with this type of building.

And what now of the future: can the present enthusiasm among chartered surveyors for research be maintained and channelled into useful fields, or will the tempo be reduced and the research continued on a more limited basis? There would seem to be every indication of a continued high intensity of effort by the Panel. In its report the Panel declares that its ultimate aim is to increase the efficiency of the chartered surveyor concerned with

building costs. It will be noted that this declaration does not confine itself to the quantity surveyor, but to all branches of the profession. This is highly important, for such an aim will help to integrate the building team more closely and embrace cost prediction, in its widest sense, for the building owner, a study in which the Building Research Station is at present breaking new ground.

It is to be hoped that the Panel will have now embarked upon a more scientific form of research than the study of statistics. There is little cost guidance at present available with regard to the principal design variants of shape, heights, spans and the like, although this is essential for the proper appreciation of cost problems at sketch plan stage of design. Some research in this field was started some years ago by an independent group of chartered surveyors, but no results have yet been published. This seems to indicate that research of this kind must be undertaken by surveyors on a full-time basis, possibly as a post-qualification study; the RICS is surely the body to promote this vital task.

The Panel has its sights now focused upon the setting up of a cost information service, a subject about which the profession has had widely differing views. Cost libraries used by those qualified to do so might be a forward step, but adequate safeguards must be taken against their misuse by others. It would seem that the field most likely to show progress in the immediate future is that of quantity surveying techniques. Having lain dormant for so long, there has quite suddenly arisen a wide realisation that methods of preparation of bills of quantities and the usefulness of the bill itself may not be in tune with the requirements of the industry today. It is to be hoped that the RICS will take the lead in modernising office routine and the format of bills to ensure that the quantity surveyor provides the service required by both the client and the industry.

If the results of the first five years of its work are a guide, the Cost Research Panel will continue to be a highly important centre of building cost research which deserves the encouragement and assistance of the whole industry.

House Repair Costs

THE METHOD of statistics, we are told, is in three stages. Collection of the raw material; its analysis; and its interpretation. It is surprising how often the process ceases at stage 1, and even more often at stage 2. The Census of Production is a case in point. Each year some builders, and some years all builders, complete under stress of penalty, a questionnaire that in its comprehensiveness borders on the intimate. The cost to the industry and to the country is immense. Yet it is doubtful if there is anybody anywhere, amongst the Universities, Government Departments, and certainly amongst the builders themselves, who could truthfully say that this gigantic exercise has ever been proved worthwhile; that it is a must to be repeated with all its trimmings.

It is a pity that some of this criticism must be levelled at the housing maintenance and repair statistics published by the Institute of Municipal Treasurers and Accountants; the more so since the collection and analysis has obviously been so thorough. Some 700 local authorities supply the Institute with maintenance information down to the smallest detail. Each year the Institute publishes a 42-page document (at 5s. a time and 2s. 6d. for extra copies) setting out almost all the facts and figures thus obtained. There is information here that the industry, and the public, could well make use of. It is conceivable, for example, that some importance attaches to the fact that the cost of internal decorations for the Gloucester Rural District Council averaged 4d. a house in 1959/60, whereas the Bristol County Borough paid out 65s. 7d. But nowhere is there a mean or norm against which these two extremes can be tested. There are other difficulties of comparison: yet here is a document that contains valuable information, authoritative and up-to-date at that, bearing on aspects of building that so far are mostly guesswork. There are details about the maintenance costs of pre- and post-war houses and post-war flats. The London County Council,

Chiesa Madonna di Campagna

CHIESA MADONNA DI CAMPAGNA, VERONA: This building was the last work of Michele Sanmicheli, the 16th-century Italian architect, being designed a few months only before his death in 1559. Sanmicheli, born in Verona, son of an architect-sculptor, was (according to Mr. Peter Murray, who writes an introduction to the catalogue of the exhibition now on view at the RIBA, 66 Portland-place, W1) 'an architect and military engineer, and nothing else.' Born in 1484 he went to Rome at the age of 16 and in 1509 became Surveyor to Orvieto Cathedral, a post he held for some 20 years before returning to his native city to work for the Venetian republic. Mr. Murray writes: 'Sanmicheli started from a Bramantesque simplicity and gradually evolved a highly picturesque style which owes something to his military work and something to the later forms of Roman art that came under his notice; and this underlying principle of his development might be traced from Bramante's Tempietto through Sanmicheli's peristylar and domical buildings, although all his ecclesiastical buildings seem to stay much nearer to the calm serenity of Bramante.' The Madonna di Campagna commemorates a miracle and, adds Mr. Murray, 'it is deeply significant that in the planning of such a building the principles which had been established by Bramante for the Tempietto (and indeed for St. Peter's itself) were not departed from.'

it is stated, averaged £21 9s. 8d. on the external decoration of each of their post-war flats, compared with £13 13s. 8d. for their non-traditional houses; £19 4s. 2d. for their post-war traditional houses; and £14 16s. 5d. for their pre-war houses. Again, a number of authorities clearly found that their non-traditional properties cost a lot more to maintain than their traditional.

If these examples are typical, could it follow that any saving in land costs by building high can ultimately be offset by higher maintenance costs? And that similar considerations are relevant to traditional and non-traditional building? Maybe we tend to pay too much attention to building costs, meaning the cost of the structure itself, and too little to the structure's 'cost-in-use.' Future generations of dwellers in non-traditional flats may devote less of their income to a mortgage, but their total annual outgoings may be higher, nonetheless. The Institute's survey provides the raw material which opens up important avenues for investigation. Surely it is the responsibility of someone, the Ministry of Housing, for example, or possibly the Institute itself, to ensure that this mine of information is used in the most effective way.

Notes of the Week

Reorganisation of the AA; Not So Firm Tendering; British Colour Council

THE ARCHITECTURAL ASSOCIATION, which can always be relied on to provide news, has done it again. This time, the news is concerned with its own future as a school and as an association of graduate architects—two elements which, from the time when the school first became a place of full-time architectural education, have cast a wary eye each upon the other. Hopefully perhaps, bravely certainly, the present AA Council does not believe this situation to be either good or inevitable, and has taken the course made possible by the impending departure of Michael Pattrick as Head of the School and of H. J. W. Alexander as Secretary to make a radical administrative reorganisation. The council has decided to bring both the Association and the School under the direction of one person, and has appointed Edward J. Carter to be Director as from June 1, with instructions 'to control all activities so as to bring the curriculum of the School and the activities of the Association as closely as possible together.' The new Head of the School will be W. A. Allen, and the successor to H. J. W. Alexander will be George Wiltshire, the present Assistant Secretary.

* * *

THESE THREE should make a good team. Bill Allen is no stranger to academic life (his father and elder brother have both held University chairs) and he has a high reputation among younger architects and senior students as a man who believes that science, since it increasingly conditions architecture, should be architecture's servant, not its master. His practical outlook, and the sincerity with which he advocates his beliefs, will stand him in good stead next September when he takes over the School. In George Wiltshire the AA will have an admirable successor to 'Alex' Alexander, who, like Frank Yerbury before him, has been the 'father figure' of the Association in the minds of the majority of members. This is not the time to sing the praises of the retiring Secretary, but it is good to know that the Council have appropriate steps in mind.

* * *

OF THE NEW DIRECTOR, Edward Carter, less is currently known, perhaps, due to his 11-year spell with Unesco in Paris. He should not be without ideas on the conduct of an organisation such as the AA (shortly before the war he contributed to an RIBA general meeting a paper on 'The Case for a Learned Society' which drew one of the late Sir Ian MacAlister's rare interventions in RIBA discussions) but perhaps his long absence from the architectural scene will have sharpened rather than blunted perception of what the AA needs. We wish him and his team success.

Not So Firm Tenders

SOME SIGNIFICANT POINTERS came out of the first Press conference held by the incoming President of the National Federation, Mr. Frank Russon, in London last week. Most importantly was the National Joint Consultative Committee's re-statement of the need for proper planning as a prerequisite of fixed price tendering. This plea has been made so often of late that it is acquiring some of the characteristics of a Greek chorus—warning noises that no one heeds until too late. Yet action directed towards getting architects and their clients to honour the conditions attached to this form of tendering is badly needed; one sign is that in parts of the country some architects are going over to fluctuation-clause contracts because they get better prices from contractors. The latest authority to do so (see page 406) is Kent County Council.

* * *

NOT ALL THE BLAME for this should be attributed to the profession, however. The cost of labour will increase in October, but meanwhile it is very difficult to get firm prices for materials, more especially so when the delay between putting in and acceptance of a tender is so long. Nevertheless, builders would insist that the biggest single factor in high building costs and slow completion times is the lack of proper planning—which is another way of saying that there is a need for better client-control by architects. Perhaps the time is coming when something more than advice is needed; at all events, the Federation's council at its next meeting is to consider the question of qualifying contracts by the inclusion of clauses making compliance with the terms governing the submission of fixed-price tenders essential. We should regret such a decision, were it made, if only on the grounds that qualifying clauses on a closely-knit document such as a form of contract sometimes have unexpected results; that the matter is under discussion at least indicates the degree of dissatisfaction felt by builders at the present situation.

British Colour Council

THE BRITISH COLOUR COUNCIL'S exhibition of 'Town and Country Colours' (Series Four) opened on February 22 and is on view to the trades concerned, and the public by invitation, until March 24 at the Council's house, 13 Portman-square, W1, writes Basil Marriott.

What is described as the new colour trend 'illustrates the feeling for cool browns, warm tans, soft blues, cool greens and golds.' The theme is the furnishing, decoration and equipment of a bungalow (planned by Mr. F. S. Panther, FIBD) and three-dimensionally shown in a sort of telescoped or foreshortened mock-up representing four room settings. Supplementary or explanatory kiosks display swatches, dabs and samples in the exhibition room, on an adjoining landing and in the Robert Wilson Room on an upper floor. The titles of some of these trend-shrines—like that of the 'Pink Thoughts' Bedroom—seemed of an archness borrowed from the frankly subtopian-targeted women's magazines and (equally frankly) the flavour throughout suggested this public to the exclusion of more adventurous or sophisticated alternatives.

No doubt the BCC knows its public—and certainly the highly competitive and hard-boiled industries and trades which it represents and serves in its function—

Poet's Corner

AN MP has called attention in Parliament to the 'distressing' design of prefabricated farm buildings.

Farm buildings in the days gone by
Always gave pleasure to the eye;
Their contours, dignified, serene,
Served to enhance the rural scene.

Now farmers, from control exempt,
Seem to hold beauty in contempt;
They help the errant prefab makers
To desecrate our rural acres.

Come, gentlemen, and do your duty—
Use needs to be combined with beauty;
In tone and texture, form and siting,
Please make your structures more inviting.

ANON.

'for the co-ordination of colour and design.' Indeed, the aggregated interests disclosed by even a glance at its Interior Decoration Divisional Committee, not to mention Royal Patronage and the distinguished names of its principal officers, make it the more paradoxical that the BCC should seem content with something short of pace-setting and trail-blazing in its own special field.

I have expressed this puzzlement in noting its previous exhibitions here, and since there is little joy for either side in continuing to nag obviously sincere and enthusiastic staff for what may be matters of policy or expediency, I have (equally sincerely) devoted some re-thinking to the feeling of vague dissatisfaction which this annual event evokes.

* * *

To condense, and remove any rough edge from this, I think it is mainly regret for a lost opportunity, which goes back a long way and is best expressed in generalities. Colour is a very personal thing: this could probably be explained in terms of physiology, and certainly psychology, being instinctive and not cognate. Like taste, of which colour is a vital factor, either you have it or you don't—and its absence is no more a matter for blame than bad health. Neither taste nor colour sense can be got out of books, gathered from exhibitions such as this, nor guided by seeking to relate long-term problems attending interior design and decoration with those of dress which, for human and business reasons, is deliberately kept an ephemeral matter of fashion.

Top-level research into the Motivation of Taste is long overdue—by some international working-party comprising art-historians, artists, psychologists and sociologists among others. One would have liked to see the British Colour Council, bang from the start, right in the forefront of such an enterprise, within the limitations of its terms of reference. It is simply a matter for regret that circumstances, or choice, have seemed to hold it back.

The Architectural Association

Wide Administrative Changes

THE COUNCIL of the Architectural Association has re-arranged the administration of the Association and the School, and has appointed Mr. Edward J. Carter, MA, ARIBA, AADipl, to be Director of the Architectural Association and the School, as from June 1, with instructions to control all activities so as to bring the curriculum of the School and the activities of the Association as closely as possible together.

At the same time it has appointed as Head of the School of Architecture Mr. William Alexander Allen, BArch (Manitoba), ARIBA, at present head of the Architects' Division of the Building Research Station. He takes over on September 1 next.

Consequent on Mr. H. J. W. Alexander's impending retirement in June next from the post of Secretary, the Council have appointed Mr. George Wiltshire, the Assistant Secretary, to succeed him.

The Council's Full Statement

The council of the Architectural Association announce that Mr. H. J. W. Alexander, who has been on the staff of the Association for 48 years and Secretary since 1937, is retiring in June next. The Council wishes to take this opportunity to acknowledge the great debt that it and the whole membership owe to 'Alex' and to state that it intends to take immediate steps to give members an opportunity to show their appreciation in an appropriate manner.

The Council has had under consideration, therefore, not only the appointment of a new Principal but also a new Secretary. It has decided to re-arrange the administration of the Association and the School so as to increase the closeness of the link between them which has always been a feature of this institution.

It has appointed Mr. Edward J. Carter, MA, ARIBA, AADipl, to be Director of the Architectural Association, with instructions to control all activities so as to bring the curriculum of the School and the activities of the Association as closely as possible together.

It has promoted Mr. George Wiltshire, whom members will know so well as Assistant Secretary, to the post of Secretary of the Association.

It has appointed as Head of the School of Architecture Mr. William Alexander Allen, BArch (Manitoba), ARIBA, his appointment to take effect on September 1, 1961.

Biographical Details

MR. EDWARD CARTER, who is 58, was a student at the AA School between 1923 and 1929, after reading History at Magdalene College, Cambridge. After a short period as assistant to Maxwell Fry, he was appointed Librarian to the RIBA, a post he held from 1930 until 1946 during the major part of which period he was Editor of the RIBA 'Journal.' In 1946 he was made head of the Libraries Division of UNESCO in Paris. On his return to England in 1957 he initiated the programme of the Gordon Fraser Gallery for the publication of postcards of British architecture and sculpture.

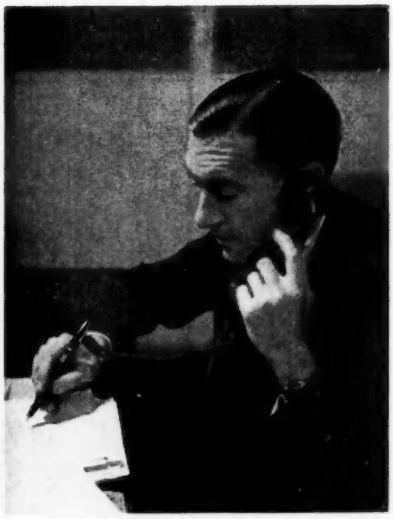
MR. W. A. ALLEN, who is 46, was born in Winnipeg, one of the two sons of the first professor of Physics at the University of Manitoba. His elder brother holds the chair of Natural Philosophy at St. Andrews University. Educated in Winnipeg and at the Manitoba School of Architecture, Allen came to Britain in 1936 and in 1937, on Hope Bagenal's advice, joined the Building Research Station where, with Robert Fitzmaurice, he interested himself in work on acoustics.

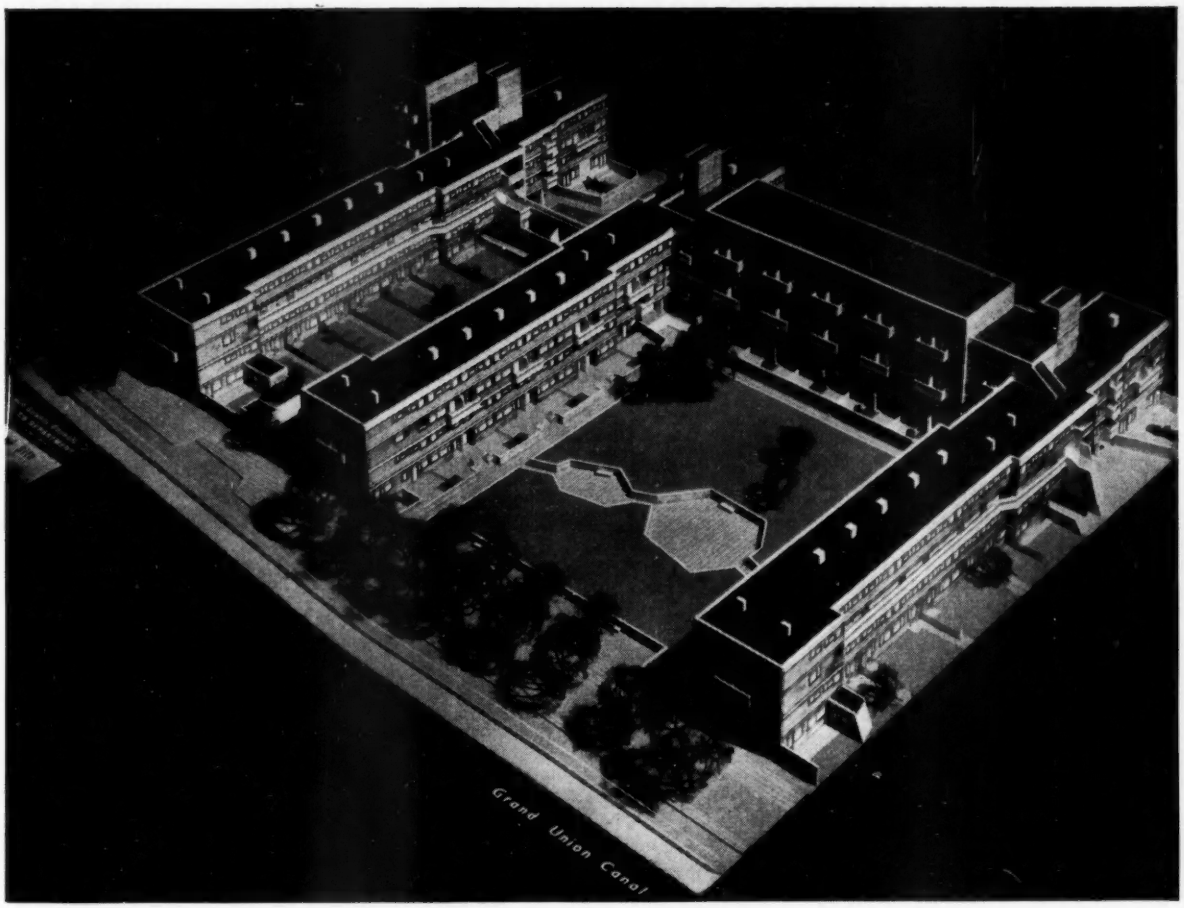
After the war he worked on the design of the Royal Festival Hall with R. H. Matthew and Sir Leslie Martin as one of the acoustics advisers. He formed a separate Architects' Division at BRS in 1953.

E. J. Carter, MA, ARIBA

W. A. Allen, BArch, ARIBA

George Wiltshire



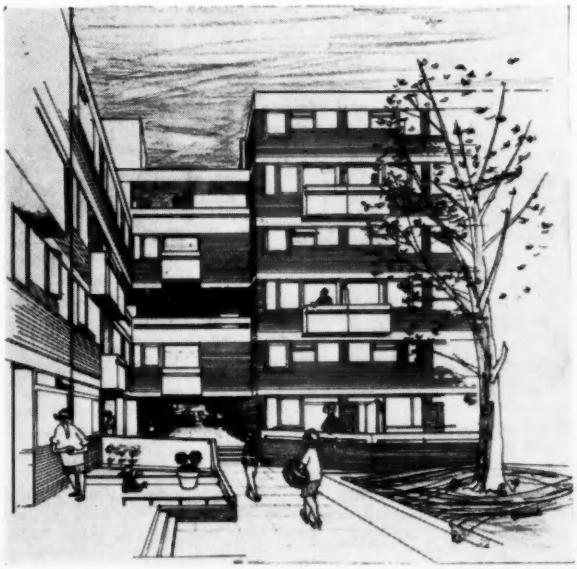


View from canal; below, view of way through from open space

Open-plan LCC Housing, Shoreditch

HUBERT BENNETT, FRIBA, architect

ABOUT 7.4 acres bounded by Pownall-road, the Grand Union Canal, Marlborough-avenue and the rear of shops fronting Broadway Market, Shoreditch, are to be developed by the erection of 299 flats and maisonettes in blocks of 4- or 6-storeys designed to form a continuous building partly enclosing three large grassed and planted areas which will open on to the Grand Union Canal on the south side. The whole of the living area will be free from traffic. Paths and three play-spaces will be sunk to ensure the privacy of nearby rooms. The scheme includes a 4-storey block of old people's flats; on the ground floor of this block the flats will have gardens on a private terrace. Four blocks of maisonettes (three of 6 storeys and one of 4 storeys), five 4-storey blocks of flats and maisonettes, 76 tenants' stores, 78 garages and a works depot are included in the scheme. Electric under-floor heating will be installed in the 6-storey maisonette blocks and in the 2-room flats adjacent to them. Open fires with back-boilers will be provided in the remaining dwellings. Estimated cost is £830,000.



Designing for Television

Some Problems and Opportunities

BY PETER CALDWELL

AUTHOR'S NOTE: *The intention in writing an article of this nature is certainly not to teach anyone how to draw but to show those people already sufficiently talented the comparatively new opportunities which have arisen with the advent of Television. 'Once upon a time the living theatre and the film industry married and a child was born. . . .' Well could the story so start. Although television in this country is still somewhat in its infancy it is certainly a big bouncing baby—its parents looking on with awe, amusement, sometimes envy, as their brainchild draws the ever-increasing attentions of an admiring public. Such is the competition between the rival television networks that a high standard of programming is realised by those responsible on both sides in order to satisfy a viewing mass endowed with the unique power to accept or reject at the flick of a switch.*

THE MEDIUM OF TELEVISION offers a tremendous new field for set designing, which I as a member of this artistic body intend to elaborate upon in this article. To the vast majority television gives the immediate impression of a smaller version of the cinema screen, when in actual fact it is a compromise between the theatre and films. The medium has far greater visual scope than any stage, but not the immensity and range of a motion picture. From these observations then it is understandable that a new outlook on design was needed. Television designing in this country is still in a somewhat transitional stage, recruitment of design staffs throwing together men of widely differing backgrounds and experience. From the illustrious ranks of stage and film, designers were tempted into this exciting new medium. But also the way was open for young men of design and artistic ability to learn and get on. The work was and still is hard but rewarding.

Such is the importance of television in our lives now, that the need for a specialist course in television designing has been realised and instituted to cope with the demand. The whole essence of television is speed—speed in the initial thinking up of a design and its execution to fit in with a tight schedule of programming which involves staging and striking sets so that the minimum of valuable time and studio space is wasted.

The Designer. . . .

What then constitutes the make-up of a good television designer? Basically and briefly: artistic ability, taste, speed, and the all too rare gift of getting on with and understanding the other person's particular problems. On top of these, I will add a knowledge of the studio technical facilities at his disposal—a camera's capabilities and the effects of special lighting, etc.

Artistic ability is simply the capability of conveying to others by means of sketches the conjured pictures of what is in the designer's mind.

Taste is not just necessarily good taste but sometimes bad taste. This may sound rather a contradictory statement to make, but it is true in as much as sets may be required which reflect a person of little discrimination living in a room. In other words a designer must also be an understanding student of human behaviour and cater for good, bad and extreme variance in human living conditions.

Speed really speaks for itself, such is the greed of television for new material and ideas all the time.

To say that designers take their work home with them would be the understatement of the year. I think I can speak for most designers when I say we eat, sleep and breathe design and art work. Our whole outlook on life is heightened by the instinct which makes us look for pattern, rhythm and dramatic tricks of light in our everyday comings and goings, things which tend to escape the eye of the uninitiated.

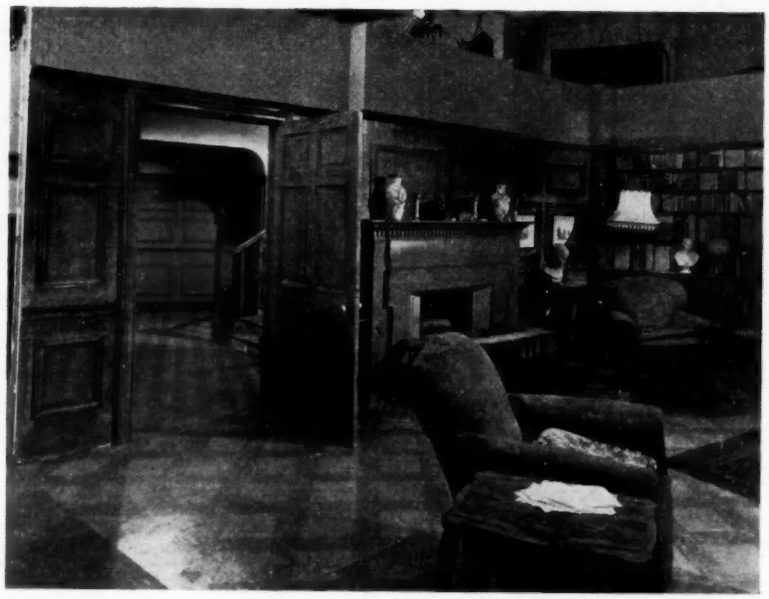
My own sketchbook is seldom far out of reach—and when I am back at work it assumes the importance of research material. Such is the demand and range of television that a designer is called upon to cater for programmes demanding sets of every period, architectural style and location. He would be a design genius indeed who could tackle everything from say a ship's interior to an exact replica of a room in the Kremlin without batting an eyelid, and even though we do have our near geniuses a great deal of research is sometimes called for.

. . . and His Duties

Upon the designer's shoulders rests a great deal of responsibility, and an examination of his duties at this stage will be an advantage.

It has been decided to do a certain play and so a copy of the script is delivered to the designer many weeks in advance of the transmission date. After carefully reading the story to find out the location, period and exact number of sets required he prepares a scaled ground plan which is simply a plan of the studio floor upon which he pencils the plans of his sets as he sees them and their relative positions to one another. Various issues are carefully considered by the designer before putting pencil to paper. The action of the story is considered—perhaps an actor's presence is required in two consecutive scenes on different sets, in which case those sets are so arranged on the studio floor that the actor can easily and speedily transfer himself from one set to the other. Cameras and sound booms are given sufficient room to operate in and out of the sets.

The problems mentioned, together with numerous other unforeseen snags are eventually ironed out at a pre-planning meeting which comprises the director, technical heads, set construction manager, property manager, wardrobe, make-up and representatives of any other departments concerned in the play. The designer must put before the assembled



An interesting set for the television adaptation of 'Guinea Pig.' The scenic artist has done a good job with the painted floor. Carpeting is not a desirable thing on studio floors as the cameras cannot move over it with ease—although a small carpet has been used here because of its unobtrusiveness in this respect

company a reasonable and clear display of 'visuals'—his interpretation of the settings required to best put the story over. The results of careful research and his knowledge must be open to comment and suggestions.

Even though the ground plan of the studio with the sets thereon give the director and the 'technical boys' a chance to work out their camera movements and angles, these visuals, which I consider indispensable, put everyone in the picture. Copies of the visuals are distributed to director, construction, scenic artists, properties—who furnish the sets, and design draughtsman who must translate the designer's ideas from sketches to working drawings for construction purposes.

The scenic artist is also supplied with sketches for 'backcloths' to go behind a window or opening in a set, which can take the form of a landscape or the other side of a street and such things as the story demands. Backcloth visuals are carefully squared off to a scale usually 1 in. to 1 ft., so that should a backcloth of dimensions 10 ft. x 8 ft. be required, the scenic artist can select his cloth and square it off to coincide with the squares on the visual. In this way an exact reproduction of the scene on a larger scale is painted.

Set Decoration

Quite the most important part of a designer's duties, once his sets are in the construction stage, is his choice of colours and wallpapers.

The viewer will see programmes only in tones of grey for a number of years yet until colour television makes its public bow. Consequently, designers think in terms of tones when choosing their colour schemes, using what is known in television as the 'Grey Scale.' The 'Grey Scale' is a chart comprising 10 tones of grey—No. 1 grey, for example, being the nearest a designer would get for white, and darkening right up the scale to No. 10 grey, this being television's substitute for black. Of course it would be very depressing indeed if a designer were to have his sets painted only using grey paints, and an experienced designer can invariably choose a definite colour knowing what tone of grey it will appear on camera. Depressing it would be too for the unfortunate actors who would have to do their best in sets devoid of colour and atmosphere. Whilst a designer is always safe using only greys, they would give the set a certain drabness and lack of vitality. It is quite surprising how the use of colours on the sets brings them to life and even though the viewer still only sees them as tones of grey he is subconsciously aware of colour.

White is seldom used in television as it tends to glare, and yellow is a good substitute. A very pale blue is also used for similar effect. For anyone who has never seen a television set on the studio floor it would prove quite an experience to see the colours used and then to see the sets on the screen afterwards.

Tonal values of all colours is something which comes to the designer with time and experience. Prominently displayed in most design departments is a colour chart with the relative tone values alongside each colour at the designer's disposal.

Wallpapers too must be chosen with extreme care as what looks a bright and cheerful choice in the light of day can look quite the reverse when seen on the screen. Good judgment in the selection of suitable wallpapers is yet again only the result of experience.

The Design Draughtsman's Contribution

A well-known designer is reputed to have said that 'a good design draughtsman can make and a bad draughtsman break a designer.' The good design draughtsman must be able to almost read the designer's mind and transform his visuals into a workable set of drawings at the same time not losing any of the designer's original concept of the setting. It is understandable, then, that the draughtsman must have a flair for artistic appreciation and architectural construction. One might describe him as a vital liaison between designer and construction man. A great many designers have blessed the period they served as draughtsmen as invaluable experience.

Conclusion

Within the limits offered by an article of this length I have endeavoured to show a set designer's contribution to television in this present day and age. No one can say for certain how he will be affected in years to come, such is the rate of scientific progress.

Without delving too deeply into the various issues dealt with, I hope I have more than proved the exciting opportunities which do now exist for those who perhaps only had a passing interest in television design and those people who were just not aware of its potentialities. The chance to enter into television designing is there for the right kind of person and the best advice I or anyone else could offer would be for that person to get in touch with the 'Head of Design' of the nearest television network offices and request an interview.

Great Britain is served by the BBC Television Service and The Independent Television Network, the latter being subdivided into regional television stations all contributing programmes to the national network. These stations comprise: Associated Rediffusion TV; Associated Television; ABC Television; Granada TV; Scottish Television; Television Wales and the West; Tyne-Tees TV; Anglia Television; Southern Television; and Ulster Television.

'Piecemeal' Planning Condemned

The Need for an Integrated Solution

TOO MANY planning authorities are incapable of thinking in terms of true planning, and only in terms of planning acts, MR. ERIC S. AMBROSE, FRIBA, told a meeting arranged by Guildford Society and the Guildford Chapter of the South Eastern Society of Architects, at Guildford. They saw, he said, too many sites as in-filling and they tackled the problem piecemeal.

'It is going to need much thought and courage and the setting aside of personal prejudices and pre-conceived ideas based on sentiment,' Mr. Ambrose declared. 'We have to plan, and plan on a large scale, and harness architects together to produce an integrated solution. Only when that happens will criticism of individual buildings have an importance and validity.'

Mr. Ambrose, who was giving a talk on architecture with special reference to the work of John Nash and to modern buildings, said that because of certain involved factors the height of buildings all over the world was levelling off at 24 storeys. The public were generally suspicious of new style and would not accept aesthetic claims on behalf of new buildings. The public 'resented something which did not wear their uniform.' He thought modern buildings were well planned for their purposes. The architects might have provided grandeur by height forced upon them by economic conditions, but dignity was not so easy to find.

Asked his remedy for the faults he had cited in the machinery of town planning, Mr. Ambrose replied that he thought town planners had a terrible task, but the general answer was that they should be given more power. 'I think the answer to be a benevolent autocracy,' he added.

Mr. G. M. Kingsford, FRIBA, chairman of the Guildford Chapter, South Eastern Society of Architects, presided.

Competition News

County Hall, Croesyceiliog, Monmouthshire

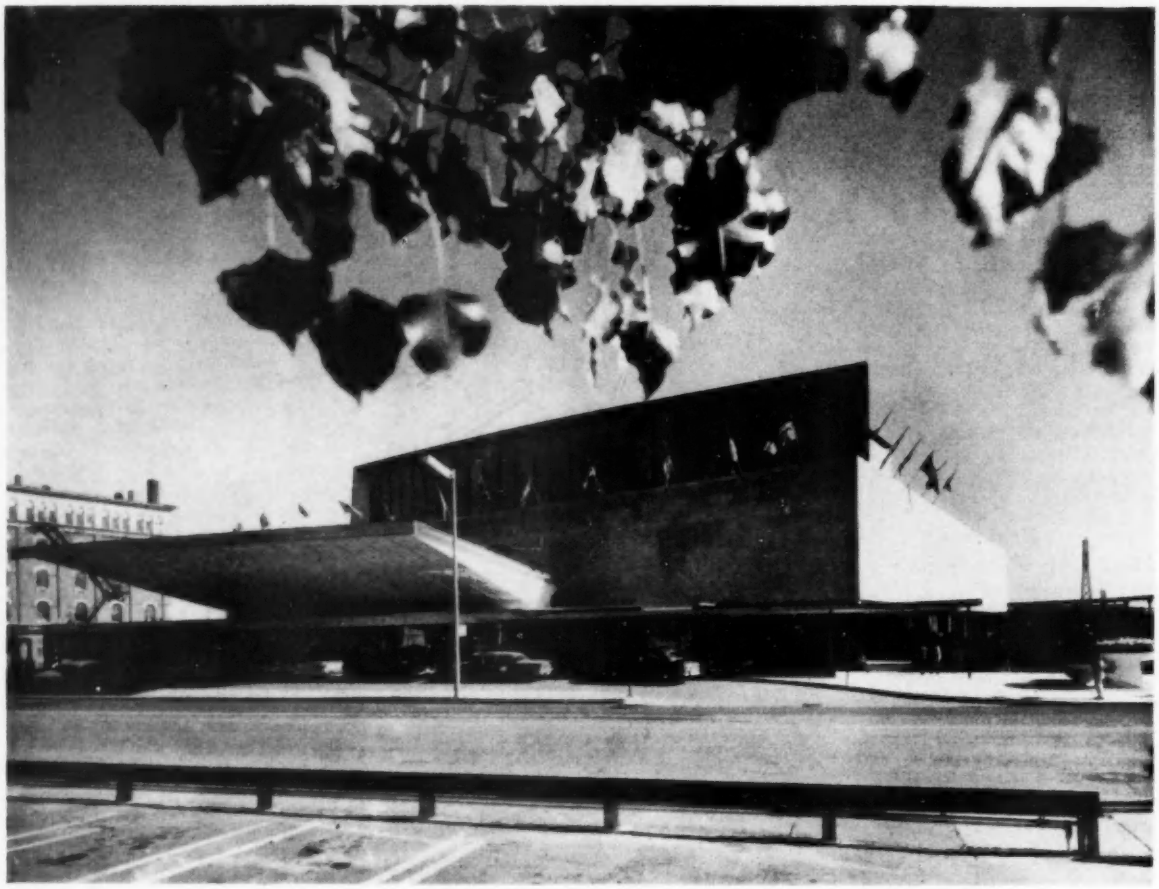
MONMOUTHSHIRE COUNTY COUNCIL propose to erect a new County Hall on a 25-acre site at Croesyceiliog, and will organise an architectural competition for plans. Conditions, etc., will be available in the autumn, it is expected.

Chester Redevelopment Scheme

CHESTER CITY COUNCIL, from 24 schemes put forward by varying developers, has selected a proposal submitted by Mr. Ian Hart, of London, for redeveloping a site of 25,000 sq. yds. adjoining the town hall with a civic theatre, market, car park and council offices, at an approximate cost of £750,000. Mr. Hart's architects are Messrs. Michael Lyell Associates, 16 Yeoman's-row, SW3, whose scheme has been approved in principle and will now go forward for further consideration in detail.

O'Keefe Concert Hall, Toronto

EARLE C. MORGAN & PAGE & STEELE, architects (Toronto)
EGGERS & HIGGINS, consulting architects (New York)
ANGLIN-NORCROSS CORPORATION, general contractors



entrance frontage and cantilevered canopy

THE O'KEEFE CENTRE for the performing arts was completed towards the end of 1960, and financed by the O'Keefe Brewery Company to operate on a non-profit-making basis for the benefit of Toronto's 1½ million population.

The theatre has a capacity of 3,200 of which 1,000 are balcony seats. When a smaller theatre is required the balcony and the seats below can be screened off to reduce the seating to 1,200. Seating is modelled on the Royal Festival Hall, and no seat is more than 124 ft. from the stage.

There are no steps in the theatre, the aisles and dress circle being ramped similarly to the Vienna Opera House. Consequently, trucks can drive directly on to the stage to unload properties and scenery and place them in position.

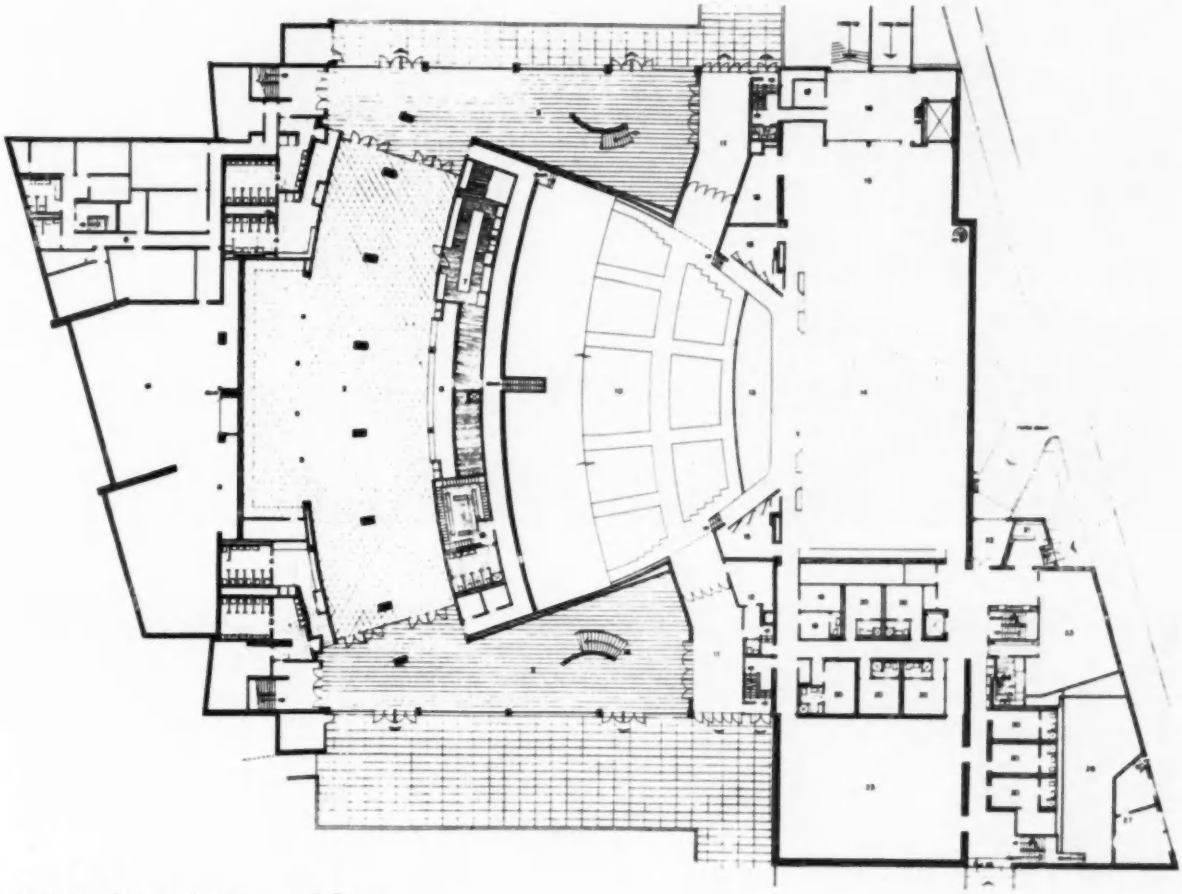
The 160 ft. wide balcony is cantilevered to avoid columns impeding sight lines in the stalls. It rests on four columns at the ends under the auditorium and a series of columns at the back with supporting ribs fanning outwards. The balcony is formed by a parabolic box-girder which consists of two members—an incline slab acting as the compression member of the box, and a vertical wall which transfers the downward thrust to a horizontal slab acting as the tension member. Seats are supported on lightweight concrete precast steps. The front balcony cantilevers forward from the box-girder, and a pattern of construction joints for the concreting had to be worked out to prevent stress distortion and to allow for shrinkage.

The orchestra pit can accommodate a full symphony orchestra and the floor can be lowered or raised mechanically with hydraulic elevators.

There is a rehearsal room of the same size as the stage with its 60 ft. x 30 ft. proscenium, a Green Room, dressing rooms and ample space for storage of properties in the wings and below stage.

For maximum sound control the auditorium ceiling is a double structure and the whole of the auditorium is doubly insulated against sound from outside. Sliding interlocking wooden wall panels are a unique acoustical feature of the auditorium. The high ceilings have been sloped as an acoustical aid.

The entire building is air conditioned. Air conditioning of the stage creates a constant balance with temperatures and



theatre and stage, lower ground floor

air movements in the theatre, so that an even temperature is maintained when the curtain is raised. Provision has been made for the heat output of colour television and colour photography.

Dominating the building is the sculpturally-formed auditorium roof above the two-storey main foyer. The stage tower of solid limestone slabs rises 60 ft. above the auditorium. An 80 ft. canopy projecting from the glass and granite face of the building shelters the curving entrance driveway.

A vestibule of 1,600 sq. ft. leads into the foyer through a 52 ft. wide entrance. The main foyer runs the entire width of the building and is two storeys high. A mural, depicting the arts, extends for 100 ft. along the foyer above the entrance doors. The total area of main lounge space amounts to 36,000 sq. ft., which can be made available as exhibition space. The building cost £4,400,000 (12 million dollars).

The 2½-acre site has landscaped courtyards and an esplanade on three sides of the building.

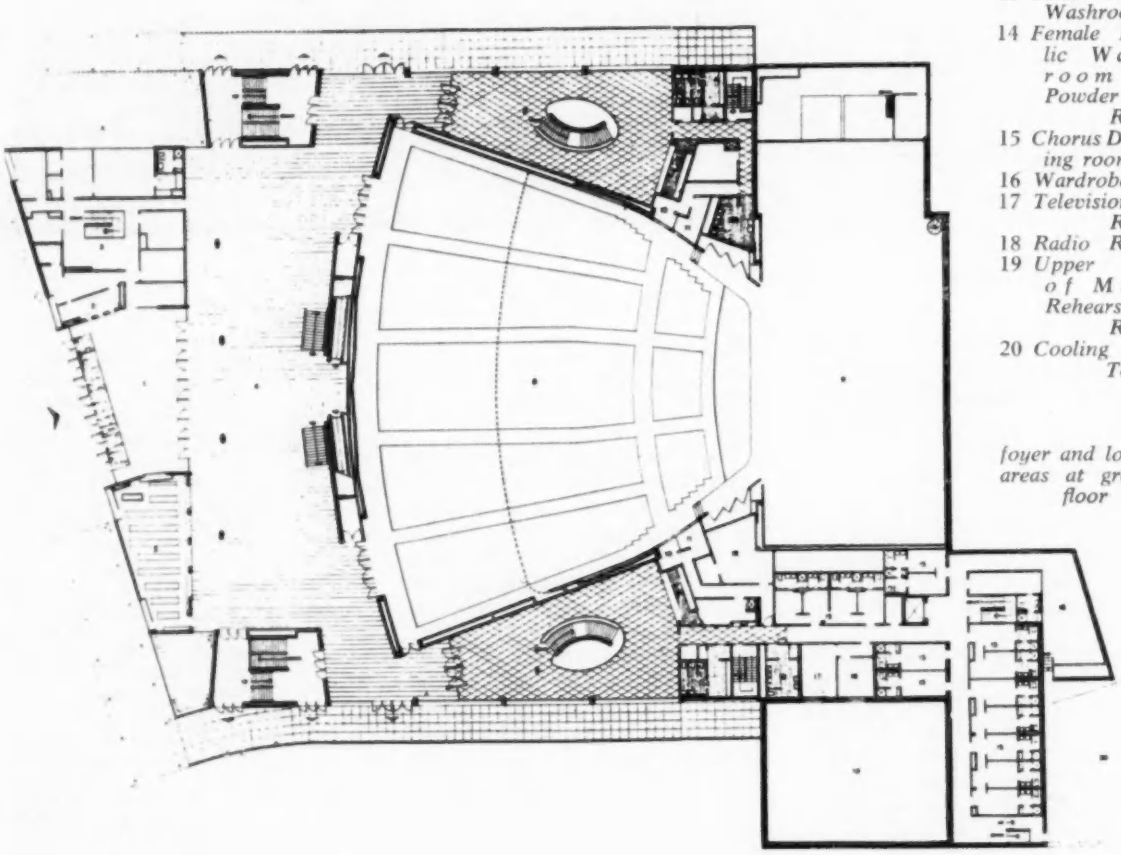
Consultants: *Consulting Structural Engineers:* M. S. Yolles & Associates, Toronto; *mechanical consultants:* G. Granek & Associates, Toronto; *electrical consultants:* Jack Chisvin & Associates, Toronto; *Acoustical Consultants:* Prof. G. Henderson, University of Toronto, and Michael Kodaros, New York City; *consultants to mechanical consultants:* Syska & Hennessey, New York City; *stage consultant:* Prof. E. A. Cole, Yale University; *radio consultant:* McCurdy Radio Industries Ltd.

Key: 1 *Mechanical Room,* 2 *Main Refreshment Lounge,* 3 *Male Public Washroom,* 4 *Female Public Washroom and Powder Room,* 5 *Intermission Foyer,* 6 *Administration Offices,* 7 *Kitchen Servery and Storage,* 8 *Refreshment Bar,* 9 *Staff Locker Room,* 10 *Auditorium—Orchestra Stalls,* 11 *Front Stalls Exit,* 12 *Vice-Regal Suite,* 13 *Orchestra Pit,* 14 *Stage,* 15 *Side Stage,* 16 *Stage Unloading Area,* 17 *Stage Office,* 18 *Property Room,* 19 *Manager's Office,* 20 *Principal's Dressing Room,* 21 *Stage Door Attendant,* 22 *Unloading,* 23 *Green Room,* 24 *Green Room Kitchen,* 25 *Main Rehearsal Room,* 26 *Electrical Room,* 27 *Transformer*

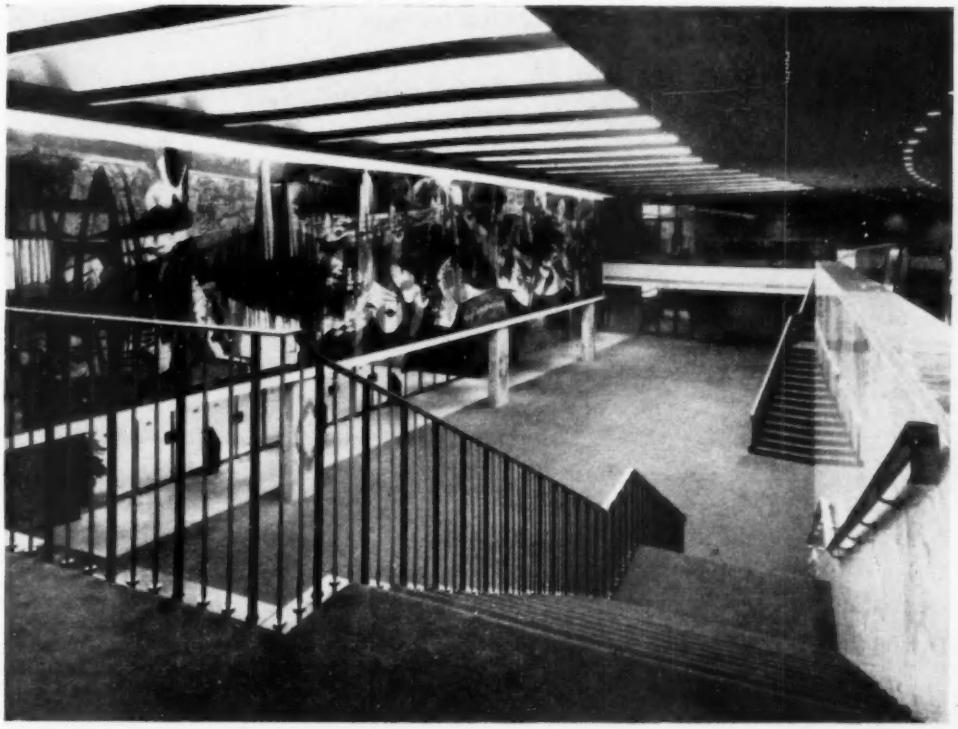
Left, the main refreshment lounge forming an arc around the auditorium, with mirrors and seat-surrounds to each column

Key to Ground Floor:

1 *Vestibule*
2 *Ticket Office*
3 *Administration Offices*
4 *Entrance Foyer*
5 *Coat Room*
6 *Refreshment Lounge*
7 *Refreshment Bar*
8 *Auditorium—Orchestra Stalls*
9 *Upper Part of Stage*
10 *Announcer*
11 *Control*
12 *Master Control*
13 *Male Public Washroom*
14 *Female Public Washroom and Powder Room*
15 *Chorus Dressing room*
16 *Wardrobe*
17 *Television Room*
18 *Radio Room*
19 *Upper Part of Main Rehearsal Room*
20 *Cooling Tower*



foyer and lounge areas at ground floor



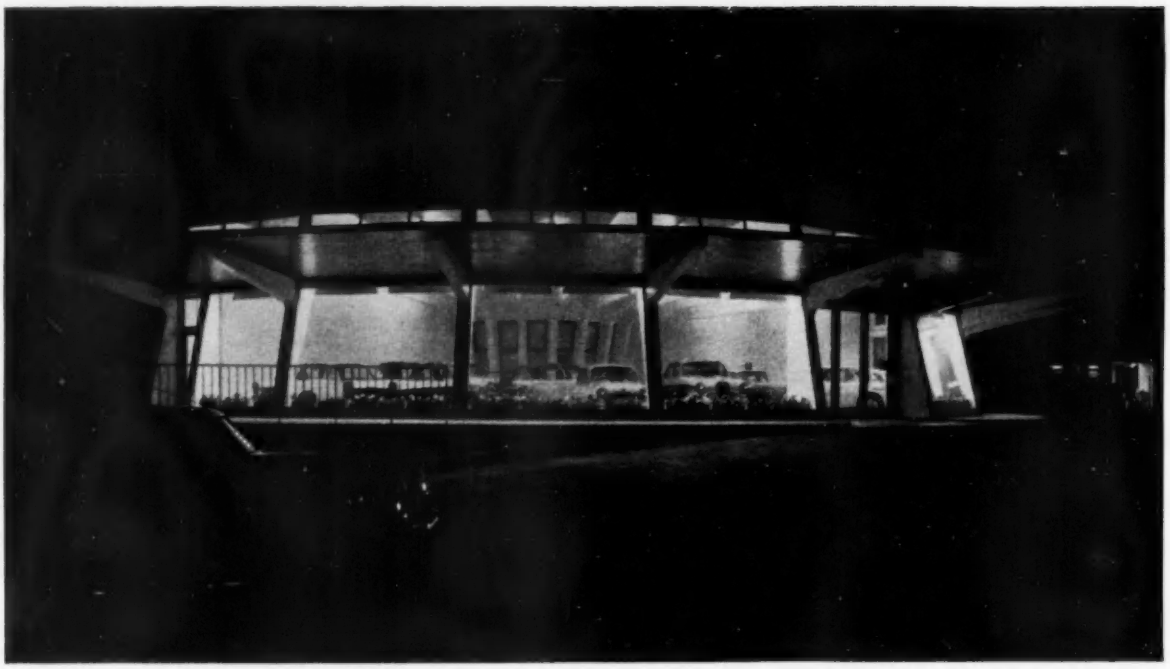
O'Keefe Concert Hall, Toronto

Left, 100 ft. mural in the main foyer depicting the seven lively arts. Below, the theatre auditorium has sliding acoustic panel walls

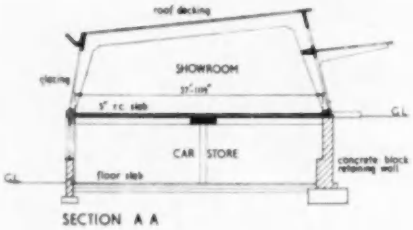
Radial Portal-Frame Structure

for a Motor Showroom, Surrey

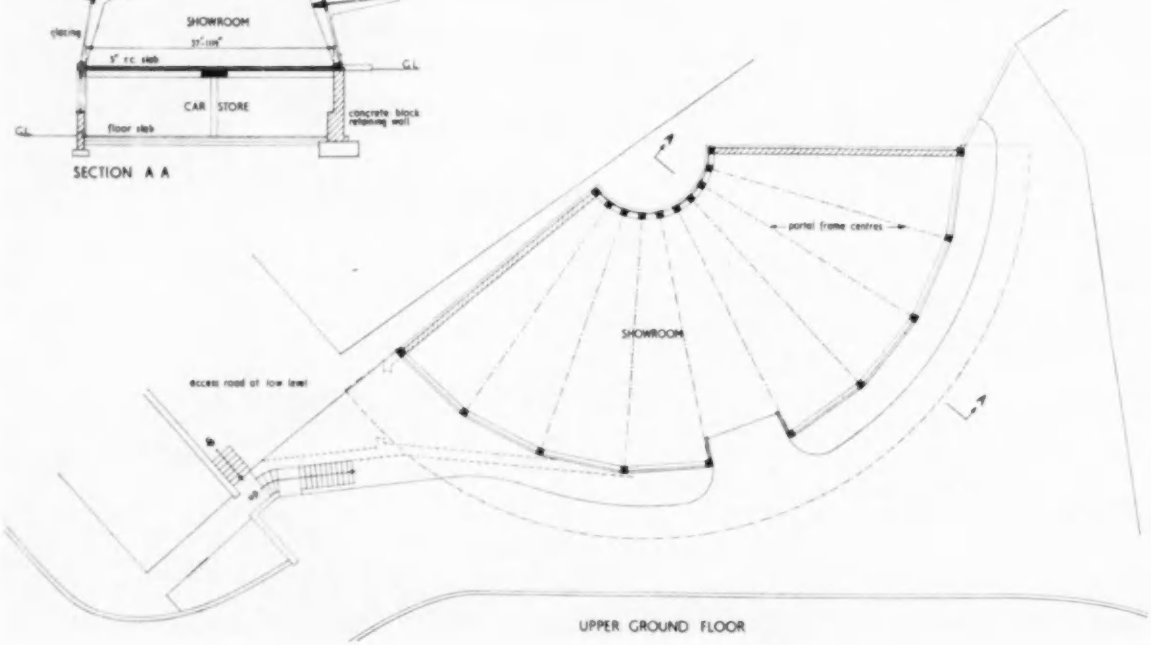
WILLIAM H. AREND & SON, architects



Above, night view showing the portals radiating from the semi-circular inner core. Facing page, brackets cantilever out from each portal to support the canopy



SECTION A A



UPPER GROUND FLOOR

TRUSCON LTD., reinforced concrete design and construction
LAND & PROPERTY INVESTMENTS LTD., general contractors

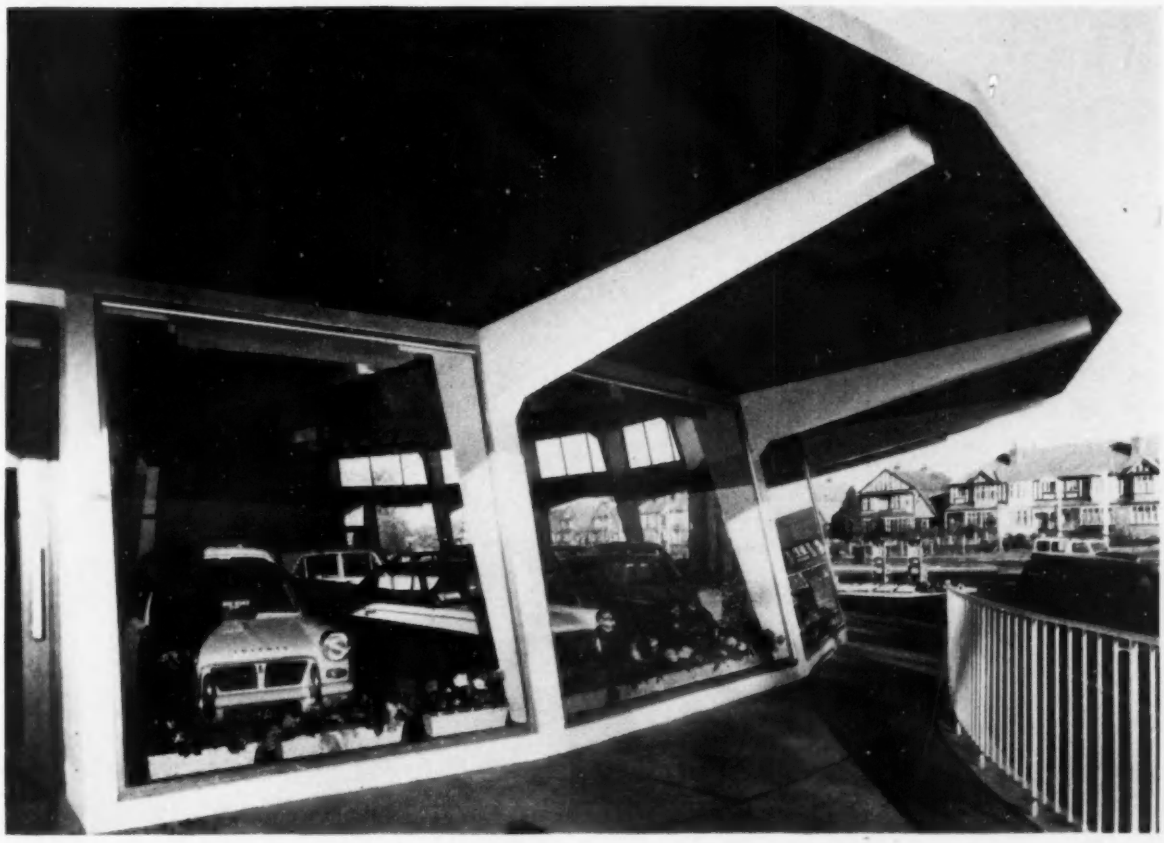
AN UNUSUAL reinforced concrete motor showroom and car store was completed recently at Ewell in Surrey. It stands in a prominent position at the junction with the Ewell By-pass. The site rises slightly from the road to give access to the front of the building, which is occupied by the single-storey showroom; a car store below, for use largely as an overflow for cars from the showroom, is reached from an access road at the back where the site dips sharply. The building is almost semi-circular, a shape well related to the curve of the road it overlooks, and the cantilevered canopy on the main façade emphasizes the curve.

A system of ten radiating portal frames of in situ reinforced concrete supporting roof decking make up the showroom structure; their tapered outer columns are expressed as architectural features on the main elevation, providing the framing for eight large plate glass windows below a canopy. The canopy is supported on tapered reinforced concrete brackets cantilevered out from each of the columns. Brick has been used as an infilling in the two flanking frames to form side walls to the showroom, and brick walls in conjunction with an existing 18 in. concrete block retaining wall (over which the curved front of the showroom is built) form the sides to the car store.

The portal frames span 39 ft. to the back of the showroom and give a completely clear floor space in which the cars are easily manoeuvred. The floor is a 5 in. r.c. slab supported on the side walls and centrally by a wide beam 4 ft. by 1 ft. 6 in. that runs along the length of the showroom floor and is carried, in turn, by 12 in. by 12 in. r.c. columns.

The showroom floor has a 3 in. thick 'Linitol' composition finish. The side walls are rendered and painted pale pink internally and white externally. The edges of the canopy and the roof overhang are painted in blue, the underside of the canopy and the interior roof soffit in a darker blue.

Special care was taken with the formwork for the structural concrete to ensure that a smooth surface was obtained, and both inside and out the concrete has been finished in a white thermoplastic paint, directly applied.



Letters to the Editor

Nottingham City Architect; Design of County Hall; The Architecture of Speech; RIBA Soccer Players Wanted

SIR,—Your reference in 'Notes of the Week' in 'The Builder' of February 17, to the remarks of the leader of the Nottingham Conservative party takes his reasons, I think, out of context. It might well be that 'Nottingham is in the Light.'

I understand the objection of the Conservative party is not to the use of architects in a correct professional capacity and indeed support is pledged to the method at present adopted, that is, the commissioning of private consultants at what they think is a considerable saving of cash to the public at large. This can be a realistic view of the situation without loss of architectural achievement.

I am of the opinion that public architectural staffs, however desirable, are very often over-established.

J. SMITH [FRIBA],
1 Church-street, Heckmondwike.

Design of County Hall

SIR,—For three years before the 1914 war I worked with Mr. W. F. Granger in Knott's office on the working drawings for County Hall, and I can reaffirm his contention that Ralph Knott designed that section of the London County Hall which was built before his death and that at no time did Mr. Hiorns assist Knott in this work. All W. E. Riley did was to hold a watching brief as the Council's Architect and to rubber-stamp all the drawings prepared by Knott's staff, for which service he was paid a handsome 'cut' from Knott's fee.

JULIAN LEATHART [FRIBA],
Mount Lodge, Sunningdale, Berks.

The Architecture of Speech

SIR,—In answer to your correspondent Mr G. S. Morriss ('The Builder' of February 24), all sorts and kinds of images flood my poor brain. If one should now and then escape on to my drawing paper in the likeness of some or other famous architect, no harm is meant. Injury is unintentional. To err is human, to forgive divine. Up the BASA!

'ACANTHUS.'

'A fairly recent discovery—note the short sight, the well developed jaw, and the tools found in the excavations!'

RIBA Soccer Players Wanted

SIR,—I have recently received a letter from Mr. Ricketts, the Secretary of the RIBA, in which he tells me that the Institute have received a challenge from the Royal Institution of Chartered Surveyors to play a soccer match against them. He also asks if I would be interested in raising a side amongst members and Students RIBA to meet this challenge.

I feel that we cannot possibly let this opportunity go without taking some action and have therefore offered to do my best to form a soccer club.

May I take this opportunity through your correspondence columns of asking any soccer-minded members or Students RIBA who would be interested in playing to contact me, enclosing a few brief notes on their abilities and position played.

Whether at this stage we can undertake to establish a soccer club formally obviously depends upon the support forthcoming, but we ought at any rate to be able to raise a side to play the RICS. Time is short, and I should therefore like names with the least possible delay.

ROY D. LITTLEJOHN [ARIBA],
5 Myrtle-road, Queen's Park,
Bournemouth.

Hospital Building Notes

No. 3—District General Hospital; No. 10—Kitchens No. 11—Dining Rooms

'THE DISTRICT GENERAL HOSPITAL' is among the three latest of the Ministry of Health's new Building Notes. It is number three in the series and is published by the Stationery Office (1s. 6d. net). The Note examines briefly the commoner departments of a district general hospital, the important relationship between them and the arrangement of the whole.

In summing up, the Note states: 'The points made should be examined most carefully in the light of local needs and conditions, whether building is on new sites or existing sites. Different problems will lend themselves to different architectural solutions, but unless the developments take place within a comprehensive plan which ensures from the outset the correct inter-relationship of departments the whole cannot function successfully.

'There can be little justification for a sprawling plan merely because the site permits it. On the other hand, this does not mean that the problem should be thought of in terms of a monolithic building for this could conflict with the need to ensure that the design is flexible and such as would allow for the probable growth of the out-patient services and the diagnostic and treatment departments.

'Since the wards are certain to have departed from the confining pattern of the traditional "Nightingale ward," they are least likely to be stultified in future by the rigidity of their envelope. Internal recasting of wards will be possible where extension of a diagnostic department housed in a tall building might not.'

No. 10—Kitchens

THE NOTE ON KITCHENS (No. 10, price 1s. 6d.) gives guidance on the design of hospital kitchens to provide 300 to 1,500 meals. For this purpose 'meals' are taken as the maximum number of mid-day meals required for patients and staff, excluding staff on night duty and making allowance for a proportion of staff being on leave or off duty. The Note applies to all kinds of hospital.

One main kitchen serving all requirements is recommended. In very large hospitals, however, 1,500 meals should be considered as the maximum to be served from one kitchen.

Kitchens should be planned to allow for the provision of a choice of dishes at each meal for both patients and staff, and for the cooking of food in relays of smaller quantities.

The kitchen should preferably be on the ground floor with staff dining-rooms on the same level.

It is essential, it is stated, that the position of the kitchen should permit of the delivery of food to the patients in the shortest possible time with the service exit from the kitchen as close as possible to the main circulation to the wards. The information in the Note has been limited as it is intended to issue a Building Bulletin on this subject at a later date.

No. 11—Dining Rooms

IT IS UNECONOMIC, this Note (price 1s. 3d.) states, to provide services to separate dining rooms or to have a waitress service. Normally, one dining area should be provided with a cafeteria service, but it should be designed to ensure a degree of privacy for small groups. 'Any departure from this will need special justification,' it is stated.

It is desirable to plan the dining-rooms on the same level as, and immediately adjacent to, the central kitchen, preferably en suite with the same kitchen with access from the kitchen to dining-room services and access to dish-washing by means of pass-through hatches. Staff access to the dining-rooms should be planned to give easy circulation under cover to all parts of the hospital.

The following Notes in the series have already been published: No. 1 Buildings for the Hospital Service; No. 7 Accommodation for Nursing Staff; No. 4 Ward Units; No. 5 Short Stay Psychiatric Unit; No. 8 Physiotherapy Department.

Headquarters Building, EC1

for British Road Services

L. ROBINSON, LRIBA (GUNTON & GUNTON), architect

FORD & WALTON LTD., general contractors

entrance hall

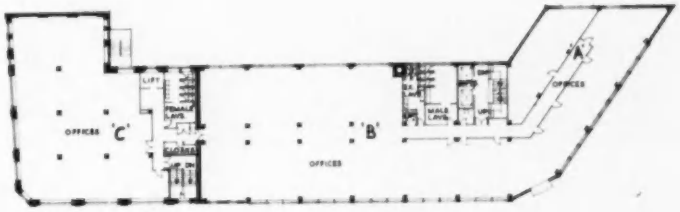
porter's desk

elevation to City-road

THE NEW HEADQUARTERS for the South Eastern Division of British Road Services is on the site of a severely war-damaged building, and closely follows the outline of the original structure.

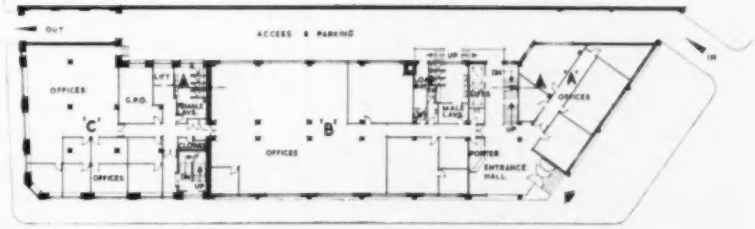
The building is 8-storeys high, and has reinforced concrete framework, floors and roof, with brick cavity walls to the rear elevation, and reconstructed stone cavity wall panels on the City-road and Dingley-road frontages. Metal windows have been used throughout the upper floors, with combined hardwood and softwood windows to the ground floor.

The main entrance hall is lined with hardwood veneered panels, with a suspended ceiling also finished in hardwood veneer and illuminated by cold cathode tubes in a continuous ceiling trough. Flooring is terrazzo in two colours, pat-



1ST TO 4TH FLOORS

GROUND FLOOR. Scale: 1 in. = 48 ft.



BRS Headquarters, EC1

senior officers' dining room

terned to echo the external relief motif used on the reconstructed stone window panels. The entrance is fully glazed.

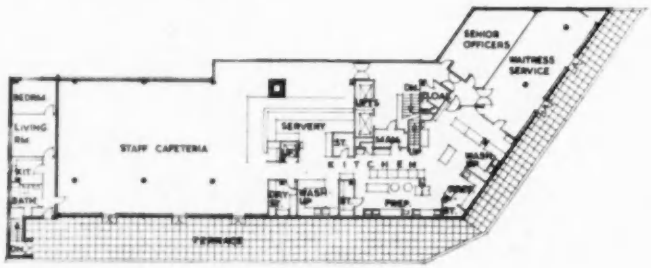
Special internal finishes have been used in the conference room and in certain of the offices. Colour has been used extensively in the staff common room, at sixth-floor, which has a summer terrace affording fine views of London.

The new building connects, at all floors up to the fourth, with an existing block which has been renovated with hardwood strip floors and suspended ceilings, and decorated similarly to the new building.

A press-button tape transfer teleprinter centre is located on the top floor of the existing building. Heating is by a central oil fired low pressure hot water radiator system, with convector heaters to the main circulation areas.

staff canteen

6TH FLOOR, Scale : 1 in. = 48 ft.



sub-contractors & suppliers :

Asphalting: Weir Asphalte & Roofing Co. Ltd.; *thermoplastic tiles:* Semtex Ltd.; *terrazzo work:* Marriott & Price Ltd.; *fittings to entrance hall:* Tillotts Ltd.; *balustrades:* Haywards Ltd.; *Glazement finish:* Robbs Cement Enamel Finishes Ltd.; *plumbing & heating, ventilating & hot water inst. & fire mains:* F. J. Baynes & Co. Ltd.; *electrical:* Mortimer Gall & Co. Ltd.; *lifts:* Hammond & Champness Ltd.; *fire escape staircase repairs:* H. Wesson & Co. Ltd.; *repairing concrete structure:* Concrete Repairs Ltd.; Cementation Ltd.; Sanders & Forster Ltd.; *maple strip flooring:* Vigers Bros. Ltd.; *lightning conductor:* J. W. Gray & Son Ltd.; *erecting wall units:* Richard Savage (Contracts) Ltd.; *column facings:* Marriott & Price Ltd.; *roofing:* Frazzi Ltd.; William Briggs & Sons Ltd.; *metal windows:* Crittall Manufacturing Co. Ltd.; *kitchen equipment:* Benham & Sons Ltd.; *cold room:* Lightfoot Refrigeration Co. Ltd.; *vynide:* British Werno Ltd.; *marble lining* J. Whitehead & Sons Ltd.; *venetian blinds:* Adam & Lane & Neeve Ltd.; *acoustic tiling:* Horace W. Cullum & Co. Ltd.; *entrance gates:* Haskins Metalwork; *reinforcement:* GKN Reinforcements Ltd.; Rom River Co. Ltd.; *cast stone:* Croft Granite Brick & Concrete Co. Ltd.; *wood windows:* A. Lewis & Sons (Builders) Ltd.; *ironmongery:* H. & C. Davis & Co. Ltd.; *metal doors, windows & cills:* Crittall Manufacturing Co. Ltd.; *sanitary fittings:* Standard Range & Foundry Co.; *window ironmongery:* Allgood Continental Ltd.; *window cramps:* H. Wesson & Co. Ltd.; *fire equipment:* Pyrene Co. Ltd.; *wall units:* British Werno Ltd.; *Werno doors:* Richard Savage (Doors) Ltd.; *Burgess acoustic-booths:* Hendry Bros. (London) Ltd.; *entrance gates:* Haskins Metalwork; *kitchen fitments:* Built-in Fixtures Ltd.; *number plates:* Robert Van Houten Ltd.; *Harco grilles:* G. A. Harvey & Co. (London) Ltd.; *plastering:* H. &. F. Badcock Ltd.; Excel Plastering Co.; *cleaning:* Eastern Baro's Cleaning Ltd.; *glazing:* Faulkner Greene & Co. Ltd.; *stone fixing:* F. Godley; *cill tiling:* E. Hawkes & Co. Ltd.; *shuttering:* Hine Ltd.; *concrete testing:* David Kirkaldy & Son; *Glamorock facing:* Alan Milne (Plastering) Ltd.; *wall & floor tiling:* J. H. Sankey & Son Ltd.; *signwriting:* Edward G. Truss; *french polishing:* C. Westbrook & Sons; *scaffolding:* W. C. Youngman Limited.

News of Week

New Records by Contractors

CONTRACTORS in Great Britain carried out constructional work to the value of £558m. during the fourth quarter of 1960, according to provisional figures collected by the Ministry of Works. This is the highest output recorded for any quarter since the end of the war. The figure was £7m. more than in the previous quarter and £49m. more than in the fourth quarter of 1959.

Work done by contractors during the whole of 1960 amounted to £2,145m., which was also a post-war record. £169m. more work was done than in 1959 or 8 per cent allowing for price changes.

Michele Sanmicheli Exhibition

AN EXHIBITION of the work of Michele Sanmicheli is now on view at the RIBA, 66 Portland-place, London, W1, until March 29 (Mondays to Fridays 10-7: Saturdays 10-5). In this exhibition, originally shown in the Palazzo Conossa, Verona, last summer, the 16th-century architect's work is illustrated by means of photographs, drawings, and plans and some interesting wooden models and sections showing construction methods and the interiors of some of the buildings. Admission to the exhibition is free.

Hull City Architect Short List

SIX CANDIDATES were interviewed on February 22 by Hull works committee from whom three were selected to appear before the next meeting of the City Council to choose the new city architect. The post has been vacant since February 2 when Mr. Andrew Rankine, OBE, ARIBA, retired. The three chosen to appear before the Council are Mr. James William Boddy, ARIBA, AMTPI, deputy director of housing at Liverpool, Mr. David Cynddylan Hughes Jenkin, BA(Arch), FRIBA, AMTPI, senior architect and head of the general division of London County Council, and Mr. John V. Wall, ARIBA, city architect and estates manager for the Gloucester County Borough Council.

Rebuilding Palace Chapel

WORK on the rebuilding of the bomb-damaged Buckingham Palace Chapel, designed by John Nash, is expected to begin in about a fortnight. Part of the chapel is to be made into a small gallery for the exhibition to the public of works of art from the royal collection. A £40,000 contract has been let to Humphreys Ltd., of New Malden. The work of restoration is under the direction of the chief architect to the Ministry of Works, Mr. Eric Bedford, CB, CVO, ARIBA.

SPUR's Views on Oxford-street

A SPECIAL meeting of SPUR will be held at the Royal Institute of British Architects, 66 Portland-place, W1, on March 22, at 4 p.m., on the subject of 'The Major Shopping Street: a review of opportunities and problems.' The speaker will be Mr. D. Rigby Childs, ARIBA, AMTPI, and Mr. Peter Chamberlin, FRIBA, will be in the chair.

The paper will be illustrated by slides and drawings. It will refer specially to Oxford-street, and has been worked out in collaboration with a group of consultants. It outlines a solution to some of the difficulties in a leading shopping thoroughfare; this would be the introduction into the street of a high level shopping way, which could be built quite quickly and independent of the redevelopment of buildings on each side of the street. This elaborates the principle of vertical segregation advocated in the SPUR 1960 report 'A Framework for Urban Renewal.'

RIBA Prizes and Studentships

MR. R. FURNEAUX JORDAN, FRIBA, has undertaken to give, in January next, the criticism of the drawings submitted in competition for the RIBA prizes and studentships, 1961-62.

RIBA Hon. Correspondent

M. ALBERT LAPRADE, SADG, President of the Franco-British Union of Architects, has been appointed Hon. Corresponding Member of the RIBA. The South-Eastern Society of Architects have appointed him Hon. Fellow of the Society.

Flats at 'Little Venice'

A BLOCK of flats is planned by the Church Commissioners on their Maida Vale estate in London, not far from the 'Little Venice' area. Demolition has begun at Nos. 105-113 Maida Vale, and building work is expected to begin in April and to be concluded by the end of 1962.

The block will have three wings of 17 storeys and will provide about 196 flats, with rents of about £400 a year. The architect is Mr. E. V. Collins, ARIBA, chief architect to G. Wimpey & Co. Ltd., the contractors. The scheme will cost about £750,000 and will be carried through by Sutherland Avenue Investments, Ltd., a company formed by the Church Commissioners.

Illuminated Sign Competition

THE JUDGES of the Illuminated Sign Design Competition sponsored by the Electrical Sign Manufacturers Association have awarded the first prize of £150 to Mr. G. Nash, of West Wickham, Kent; the second prize of £75 to Mr. T. R. Crabtree, of Prescot, Lancs.; and the third prize of £40 to Mr. H. Kirotar, of London, SE4. Consolation prizes of £10 each were awarded to Messrs. C. S. Green of London, SE26; R. C. Hammond, Chislehurst, Kent; G. E. Milton, Erith, Kent; L. Summers, Richmond, Surrey, and M. D. Cross, Quinton, Birmingham. The prize of £20 for the best entry from a competitor under 21 years was awarded to R. A. Shaw, of Liverpool.

The general view of the judges was that the standard of the design and presentation of most of the 224 entries was high. The winning design particularly attracted the judges for its originality, and because it made full use of the large panel above the fascia.

The judges were Lord Mancroft and Sir Basil Spence; and Mr. G. S. Campbell and Mr. S. D. Moyse, president and vice-president respectively of the Association. The president of the Town Planning Institute, Mr. R. Nicholas, was indisposed and unable to attend the judging.

Official Architects' Secretary

MR. W. F. HURRY, of Essex, has been appointed secretary of the Association of Official Architects, and has now taken up his post at 66 Portland-place, W1. Mr. G. F. Foxley remains as hon. secretary.

Travel Grants in the Arts

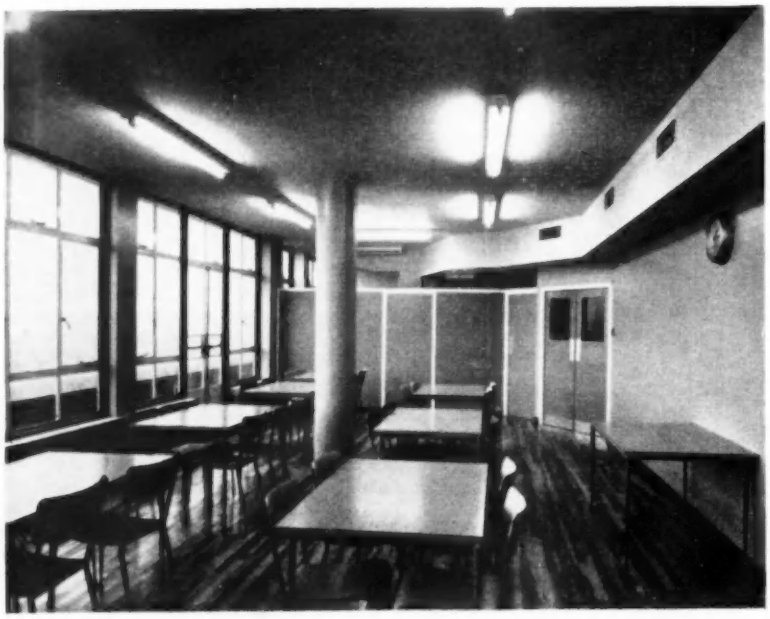
THE ENGLISH-SPEAKING UNION has announced the offer of four travel grants to the United States, these awards having been deferred from last year. Applications are invited from men and women of British nationality aged between 30 and 50, who are experienced and practising in a branch of the arts such as painting, sculpture, music, architecture or design. Museum curators and art historians are also eligible. Each grant will cover the cost of travel to and from the United States and travel within that country. There will also be a subsistence allowance for each of the 56 days spent in the United States. The grant may be taken up after mid-September, 1961, but must be completed by July 1, 1962. Application forms and further information may be obtained from the secretary, the English-Speaking Union, 37 Charles-street, London, W1.

Consultant For Salford Redevelopment

SALFORD CITY COUNCIL has agreed, following representations by the Ministry of Housing and Local Government, to engage a consultant for the re-development scheme at Broad-street, which is estimated to cost approximately £8m.

The winning design by Mr. G. Nash in the Illuminated Sign Design Competition *(see this page)*

BRS Headquarters, EC1



senior officers' dining room

terned to echo the external relief motif used on the reconstructed stone window panels. The entrance is fully glazed.

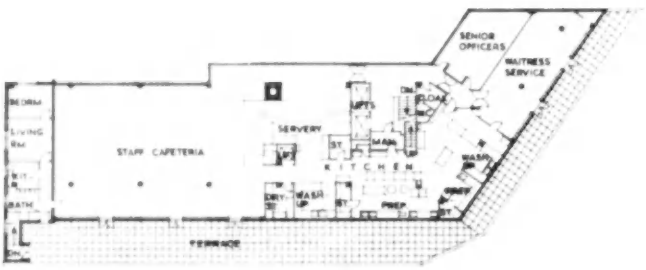
Special internal finishes have been used in the conference room and in certain of the offices. Colour has been used extensively in the staff common room, at sixth-floor, which has a summer terrace affording fine views of London.

The new building connects, at all floors up to the fourth, with an existing block which has been renovated with hardwood strip floors and suspended ceilings, and decorated similarly to the new building.

A press-button tape transfer teleprinter centre is located on the top floor of the existing building. Heating is by a central oil fired low pressure hot water radiator system, with convector heaters to the main circulation areas.

staff canteen

6TH FLOOR. Scale: 1 in. = 48 ft.



sub-contractors & suppliers:

Asphalting: Weir Asphalte & Roofing Co. Ltd.; *thermoplastic tiles:* Semtex Ltd.; *terrazzo work:* Marriott & Price Ltd.; *fittings to entrance hall:* Tillotts Ltd.; *balustrades:* Haywards Ltd.; *Glazement finish:* Robbs Cement Enamel Finishes Ltd.; *plumbing & heating, ventilating & hot water inst. & fire mains:* F. J. Baynes & Co. Ltd.; *electrical:* Mortimer Gall & Co. Ltd.; *lifts:* Hammond & Champness Ltd.; *fire escape staircase repairs:* H. Wesson & Co. Ltd.; *repairing concrete structure:* Concrete Repairs Ltd.; Cementation Ltd.; Sanders & Forster Ltd.; *maple strip flooring:* Vigers Bros. Ltd.; *lightning conductor:* J. W. Gray & Son Ltd.; *erecting wall units:* Richard Savage (Contracts) Ltd.; *column facings:* Marriott & Price Ltd.; *roofing:* Frazzi Ltd.; William Briggs & Sons Ltd.; *metal windows:* Crittall Manufacturing Co. Ltd.; *kitchen equipment:* Benham & Sons Ltd.; *cold room:* Lightfoot Refrigeration Co. Ltd.; *vynide:* British Werno Ltd.; *marble lining* J. Whitehead & Sons Ltd.; *venetian blinds:* Adam & Lane & Neeve Ltd.; *acoustic tiling:* Horace W. Cullum & Co. Ltd.; *entrance gates:* Haskins Metalwork; *reinforcement.* GKN Reinforcements Ltd.; Rom River Co. Ltd.; *cast stone:* Croft Granite Brick & Concrete Co. Ltd.; *wood windows:* A. Lewis & Sons (Builders) Ltd.; *ironmongery:* H. & C. Davis & Co. Ltd.; *metal doors, windows & cills:* Crittall Manufacturing Co. Ltd.; *sanitary fittings:* Standard Range & Foundry Co.; *window ironmongery:* Allgood Continental Ltd.; *window cramps:* H. Wesson & Co. Ltd.; *fire equipment:* Pyrene Co. Ltd.; *wall units:* British Werno Ltd.; *Werno doors:* Richard Savage (Doors) Ltd.; *Burgess acoustic-booths:* Hendry Bros. (London) Ltd.; *entrance gates:* Haskins Metalwork; *kitchen fitments:* Built-in Fixtures Ltd.; *number plates:* Robert Van Houten Ltd.; *Harco grilles:* G. A. Harvey & Co. (London) Ltd.; *plastering:* H. & F. Badcock Ltd.; Excel Plastering Co.; *cleaning:* Eastern Baro's Cleaning Ltd.; *glazing:* Faulkner Greene & Co. Ltd.; *stone fixing:* F. Godley; *cill tiling:* E. Hawkes & Co. Ltd.; *shuttering:* Hine Ltd.; *concrete testing:* David Kirkaldy & Son; *Glamorock facing:* Alan Milne (Plastering) Ltd.; *wall & floor tiling:* J. H. Sankey & Son Ltd.; *signwriting:* Edward G. Truss; *french polishing:* C. Westbrook & Sons; *scaffolding:* W. C. Youngman Limited.

News of Week

New Records by Contractors

CONTRACTORS in Great Britain carried out constructional work to the value of £558m. during the fourth quarter of 1960, according to provisional figures collected by the Ministry of Works. This is the highest output recorded for any quarter since the end of the war. The figure was £7m. more than in the previous quarter and £49m. more than in the fourth quarter of 1959.

Work done by contractors during the whole of 1960 amounted to £2,145m., which was also a post-war record. £169m. more work was done than in 1959 or 8 per cent allowing for price changes.

Michele Sanmicheli Exhibition

AN EXHIBITION of the work of Michele Sanmicheli is now on view at the RIBA, 66 Portland-place, London, W1, until March 29 (Mondays to Fridays 10-7: Saturdays 10-5). In this exhibition, originally shown in the Palazzo Conossa, Verona, last summer, the 16th-century architect's work is illustrated by means of photographs, drawings, and plans and some interesting wooden models and sections showing construction methods and the interiors of some of the buildings. Admission to the exhibition is free.

Hull City Architect Short List

SIX CANDIDATES were interviewed on February 22 by Hull works committee from whom three were selected to appear before the next meeting of the City Council to choose the new city architect. The post has been vacant since February 2 when Mr. Andrew Rankine, OBE, ARIBA, retired. The three chosen to appear before the Council are Mr. James William Boddy, ARIBA, AMTPI, deputy director of housing at Liverpool, Mr. David Cynddylan Hughes Jenkin, BA(Arch), FRIBA, AMTPI, senior architect and head of the general division of London County Council, and Mr. John V. Wall, ARIBA, city architect and estates manager for the Gloucester County Borough Council.

Rebuilding Palace Chapel

WORK on the rebuilding of the bomb-damaged Buckingham Palace Chapel, designed by John Nash, is expected to begin in about a fortnight. Part of the chapel is to be made into a small gallery for the exhibition to the public of works of art from the royal collection. A £40,000 contract has been let to Humphreys Ltd., of New Malden. The work of restoration is under the direction of the chief architect to the Ministry of Works, Mr. Eric Bedford, CB, CVO, ARIBA.

SPUR's Views on Oxford-street

A SPECIAL meeting of SPUR will be held at the Royal Institute of British Architects, 66 Portland-place, W1, on March 22, at 4 p.m., on the subject of 'The Major Shopping Street: a review of opportunities and problems.' The speaker will be Mr. D. Rigby Childs, ARIBA, AMTPI, and Mr. Peter Chamberlin, FRIBA, will be in the chair.

The paper will be illustrated by slides and drawings. It will refer specially to Oxford-street, and has been worked out in collaboration with a group of consultants. It outlines a solution to some of the difficulties in a leading shopping thoroughfare; this would be the introduction into the street of a high level shopping way, which could be built quite quickly and independent of the redevelopment of buildings on each side of the street. This elaborates the principle of vertical segregation advocated in the SPUR 1960 report 'A Framework for Urban Renewal.'

RIBA Prizes and Studentships

MR. R. FURNEAUX JORDAN, FRIBA, has undertaken to give, in January next, the criticism of the drawings submitted in competition for the RIBA prizes and studentships, 1961-62.

RIBA Hon. Correspondent

M. ALBERT LAPRADE, SADG, President of the Franco-British Union of Architects, has been appointed Hon. Corresponding Member of the RIBA. The South-Eastern Society of Architects have appointed him Hon. Fellow of the Society.

Flats at 'Little Venice'

A BLOCK of flats is planned by the Church Commissioners on their Maida Vale estate in London, not far from the 'Little Venice' area. Demolition has begun at Nos. 105-113 Maida Vale, and building work is expected to begin in April and to be concluded by the end of 1962.

The block will have three wings of 17 storeys and will provide about 196 flats, with rents of about £400 a year. The architect is Mr. E. V. Collins, ARIBA, chief architect to G. Wimpey & Co. Ltd., the contractors. The scheme will cost about £750,000 and will be carried through by Sutherland Avenue Investments, Ltd., a company formed by the Church Commissioners.

Illuminated Sign Competition

THE JUDGES of the Illuminated Sign Design Competition sponsored by the Electrical Sign Manufacturers Association have awarded the first prize of £150 to Mr. G. Nash, of West Wickham, Kent; the second prize of £75 to Mr. T. R. Crabtree, of Prescot, Lancs.; and the third prize of £40 to Mr. H. Kirotar, of London, SE4. Consolation prizes of £10 each were awarded to Messrs. C. S. Green of London, SE26; R. C. Hammond, Chislehurst, Kent; G. E. Milton, Erith, Kent; L. Summers, Richmond, Surrey, and M. D. Cross, Quinton, Birmingham. The prize of £20 for the best entry from a competitor under 21 years was awarded to R. A. Shaw, of Liverpool.

The general view of the judges was that the standard of the design and presentation of most of the 224 entries was high. The winning design particularly attracted the judges for its originality, and because it made full use of the large panel above the fascia.

The judges were Lord Mancroft and Sir Basil Spence; and Mr. G. S. Campbell and Mr. S. D. Moyse, president and vice-president respectively of the Association. The president of the Town Planning Institute, Mr. R. Nicholas, was indisposed and unable to attend the judging.

Official Architects' Secretary

MR. W. F. HURRY, of Essex, has been appointed secretary of the Association of Official Architects, and has now taken up his post at 66 Portland-place, W1. Mr. G. F. Foxley remains as hon. secretary.

Travel Grants in the Arts

THE ENGLISH-SPEAKING UNION has announced the offer of four travel grants to the United States, these awards having been deferred from last year. Applications are invited from men and women of British nationality aged between 30 and 50, who are experienced and practising in a branch of the arts such as painting, sculpture, music, architecture or design. Museum curators and art historians are also eligible. Each grant will cover the cost of travel to and from the United States and travel within that country. There will also be a subsistence allowance for each of the 56 days spent in the United States. The grant may be taken up after mid-September, 1961, but must be completed by July 1, 1962. Application forms and further information may be obtained from the secretary, the English-Speaking Union, 37 Charles-street, London, W1.

Consultant For Salford Redevelopment

SALFORD CITY COUNCIL has agreed, following representations by the Ministry of Housing and Local Government, to engage a consultant for the re-development scheme at Broad-street, which is estimated to cost approximately £8m.

The winning design by Mr. G. Nash in the Illuminated Sign Design Competition *(see this page)*

National Car Parking Survey

HOW MUCH car parking space is there in Britain? What plans are there for providing more? Which towns will have parking meters? Which ones are planning to build off-street parking garages? How much will the motorist pay to park?

These are some of the questions the British Road Federation is asking more than 400 towns and boroughs in Britain which have been invited to take part in a car parking survey. The results will be published by mid-1961. In addition to throwing light on many aspects of the problem, the survey will show which towns must have off-street parking garages; which are at present too small to justify them; and which are faced with special land value difficulties which make their provision unlikely without some form of assistance.

Kent's Fluctuation Clause Contracts

KENT COUNTY COUNCIL'S buildings committee has reported that, at the moment, it is becoming difficult to obtain sufficient tenders on a fixed price basis with the result that more and more contracts will, for a time, have to contain a fluctuations clause related to rates of wages and prices of materials. The committee says it is keeping the matter under constant review.

'Building Matters'

FEW MEN have played such an important part as Sir Richard Coppock, CBE, in bringing about changes in the building industry during the last half-century. On Tuesday, March 21, in 'Building Matters' (Network Three), shortly before his retirement after 40 years as general secretary of the NFBTO, he and Norman Longley, CBE, past president of the NFBTE and a building employer of long standing, will look back at some of the personalities and problems they have faced together. They will be introduced by Charles Crichton.

Dinner to Sir Richard Coppock

THE CHAIRMAN, Mr. Leonard A. Walden, CBE, FIOB, and council of the National Joint Council for the Building Industry will entertain Sir Richard Coppock, CBE, to dinner on Wednesday, April 26, at the May Fair Hotel, W1. The occasion will be to mark Sir Richard's impending retirement.

RDC Commissions Architects

'IN ORDER to put up houses with new ideas and designs to keep a freshness in the building of the district,' Thedwastre Rural District Council has commissioned three architects to prepare plans for the current house-building programme. The firms are: Mitchell, Weston & Clayton-Smith, 38 Churchgate-street, Bury St. Edmunds; Peter Barefoot, 22 Thorofare, Ipswich; and J. H. Warren, 5 Angel-hill, Bury St. Edmunds.

Design Index Acceptances

THE LISTS OF PRODUCTS accepted by the Council of Industrial Design for inclusion in the Design Index, hitherto issued quarterly, will in future be published each month. Persons interested in receiving these lists regularly should apply to the Design Centre, 28 Haymarket, SW1.

Building Brains Trust at Brighton

THE MEETING to be held by the south-east branch of the Institute of Quantity Surveyors at the Hotel Metropole, Brighton, on March 14 will take the form of a building brains trust. The trust will comprise an architect nominated by the Brighton district chapter of the South Eastern Society of Architects, a builder nominated by the Brighton and district centre of the IoB Discussion Club, and a quantity surveyor and arbitrator nominated by the IQS south-east branch. Questions will be put by Mr. R. E. J. Harding, PPIAAS, FIArb, AMSE, chief surveyor to the South Eastern Electricity Board. The meeting will commence promptly at 7.15 p.m.

Douglas Development Committee

A COMMITTEE OF SEVEN has been unanimously elected by Douglas (Isle of Man) Town Council to work out a long-term policy for the redevelopment of the town. In sponsoring the committee Councillor W. B. Kaneen said that Douglas had grown from a fishing village at the mouth of the river into one of the leading tourist resorts in the British Isles. The future planning, he said, would need the advice of experts in co-operation with the Government. The speaker envisaged development into four distinct precincts: tourist, residential, industrial and commercial.

Architect's Estate

MR. LEONARD ARTHUR CULLIFORD, FRIBA, FRICS, of Beckenham, Kent, left £93,320 gross, £92,855 net (duty paid, £40,241). Among his bequests were £100 each to the National Playing Fields Association, the Council for the Preservation of Rural England and the RICS.

Appointment

MR. STANLEY RIPLEY, FRIBA, DIPL.ARCH., chief architect to the County Borough of Hastings, has been appointed deputy city architect, Chester City and County.

Borough Architect to Retire

MR. C. H. A. WILLETT, FRIBA, borough architect at Reading, is to retire in October on account of ill-health.

Professional Announcements

MESSRS. E. H. C. INSKIP & SON of 29 Goldington-rd., Bedford, have recently opened a branch office in Old Tan-yd., St. Neots, Hunts., under the direction of MR. D. G. YOUNG, ARIBA, who would be pleased to receive trade literature at that address.

MESSRS. MADLIN & MADDISON, quantity surveyors, of 35-37 Grosvenor-rd., Twickenham, have opened a West Midland office at No. 1 Hampden-rd., Malvern Link, Worcs., where they will be pleased to receive catalogues and other trade literature.

MESSRS. DUNCAN, DANNHAUSER & PARSONS, chartered quantity surveyors (in association with Armstrong & Duncan in East Africa, and C. S. Parsons & Partners in the Rhodesias) have opened an office at 14 Evelyn House, 62 Oxford-st., London, W1, and would be glad to receive trade and technical literature at that address.

Coming Events

SATURDAY, MARCH 4

SOUTHERN COUNTIES FEDERATION OF BUILDING TRADES EMPLOYERS.—Exhibition. Corn Exchange, Brighton (until March 11).

MONDAY, MARCH 6

SOCIETY OF ENGINEERS.—'Some Aspects of Prestressed Concrete,' by Mr. H. Kaylor. Geological Society, Burlington House, W1. 5.30 p.m.

FEDERATION OF PAINTING CONTRACTORS.—Annual dinner and dance. Dorchester Hotel, London. 6.15 p.m.

INSTITUTE OF BUILDERS DISCUSSION CLUB (NEWCASTLE AND DISTRICT CENTRE).—'The Education of Architects and its Relation to the Building Industry,' by Mr. J. H. Napper. Royal Turks Head Hotel, Grey-st., Newcastle-on-Tyne 1. 7.15 p.m.

THE GUILD OF BUILDING.—'Timber and Timber Houses.' Lecture by the High Commissoners' Office for Canada. Spencer Arms Hotel, Ferensway, Hull. 7.30 p.m.

TUESDAY, MARCH 7

RIBA.—Joint meeting Institution of Civil Engineers: 'The Problem of Housing Large-scale Plant.' Great George-st., SW1. 5.30 p.m.

HOUSING CENTRE TRUST—'Communal Facilities on High Density Estates,' by Mr. R. J. Cowley. 13 Suffolk-st., SW1. 6 p.m.

REINFORCED CONCRETE ASSOCIATION.—'Prestressed Concrete Bridges,' by Mr. E. W. H. Gifford. Birmingham and Midland Institute, Paradise-st. 6 p.m.

LONDON BUILDERS' FOREMEN'S ASSOCIATION.—General meeting. Kent Room, Caxton Hall, SW1. 6.30 p.m.

RICS.—Annual dinner. Grosvenor House, Park-la., W1. 7.30 p.m.

DAILY EXPRESS.—'Brighter Homes' exhibition. City Hall, Manchester (until March 25).

WEDNESDAY, MARCH 8

ARCHITECTURAL ASSOCIATION.—'Nervi Buildings for the 1960 Olympics,' by Paulo Sica. 34/36 Bedford-sq., WC1. 6.15 p.m.

BUILDING SURVEYORS' INSTITUTE (DEVON AND CORNWALL AREA).—Film: 'Glass.' Duke of Cornwall Hotel, Plymouth, Devon. 7 p.m.

NATIONAL FEDERATION OF PLUMBERS AND DOMESTIC ENGINEERS (EMPLOYERS).—Annual dinner and dance. Park Lane Hotel, Piccadilly, W1. 7 p.m.

INSTITUTE OF BUILDERS DISCUSSION CLUB (BRIGHTON AND DISTRICT CENTRE).—'Introduction to Programming and Progressing for Builders,' by Mr. A. E. Chittenden. South Eastern Gas Bd. showrooms, Church-st., Brighton. 7.30 p.m.

LONDON BUILDING AND ENGINEERING CONTRACTORS ACCIDENT PREVENTION GROUP.—Annual dinner. Agriculture House, Knightsbridge, SW7. 8 p.m.

THURSDAY, MARCH 9

INSTITUTION OF STRUCTURAL ENGINEERS.—'Model Methods, with Particular Reference to Three Recent Applications in the Field of Steel, Composite and Concrete Construction,' by Prof. S. R. Sparkes and Dr. J. C. Chapman. 11 Upper Belgrave-st., SW1. 6 p.m.

FRIDAY, MARCH 10

ROYAL ACADEMY OF ARTS.—Exhibition of the Works of Sir Edwin Landseer. Diploma Gallery, Burlington House. (Open from 10 a.m.-5.30 p.m.)

SATURDAY, MARCH 11

PROVIDENT INSTITUTION OF BUILDERS' FOREMEN AND CLERKS OF WORKS.—Annual ladies' festival. Café Royal, W1. 5.30 p.m.

A Hundred Years Ago

From The Builder of March 2, 1861

'CLOSET' SEATS.—A country surgeon sends us a statement showing the evils that result from these being too high, and urging that 13 or 14 inches is about the proper height. Without going into details, we recommend attention to the advice. In the case of those already fixed, placing a step in front, on which the feet may rest, will be found a wise one.

More Everyday Things

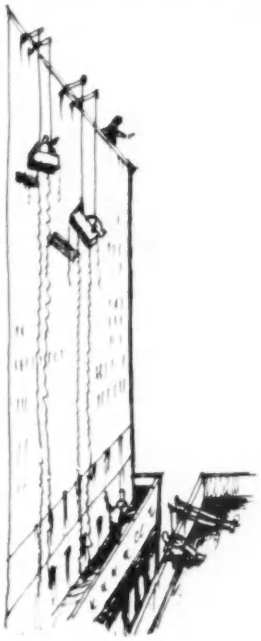
BY ARTHUR W. KENYON, CBE, FRIBA

31. The 'Cradlers'

WE LOOK WITH WONDER and admiration at the trapeze artist as he performs his act high up in the roof of the Big Top and we hold our breath when the music stops for the hair-raising moment when he performs his most dangerous feat of daring. We pay quite handsome sums for ringside seats for this spectacle of the circus, yet there are equally daring feats of trapeze artistry to be seen for free (if I may be allowed current jargon) every day in the streets where British workmen are busy painting buildings from travelling cradles suspended high up in the air on slender ropes.

The ladder has long since disappeared from these operations. Seldom now do we see the old familiar sight of a man stretching over the edge of a ladder, brush in hand, cutting in sash bars or painting downpipes. He now performs his antics from a wooden box called a cradle, fixed at each end by a block and tackle, which in turn is fixed to a cantilever projecting from the roof. The pulley blocks enable him to adjust himself and the cradle to whatever height he requires for his operation

He unties one side at a time with the result that during the process of raising and lowering there are times when the cradle is at an unhappy angle with the horizon. Even when the cradle is firmly in position and in use, it is apt to oscillate in the breeze. Such a performance on the stage would earn gasps of admiring wonder, but the British workman performs his act without spot lights and with no applauding audience. I imagine he does it also without inspection from foreman or architect, for I cannot imagine architects or quantity surveyors risking their precious lives on such a hazard either to inspect or measure.



This cradle device has become so universal as to require a permanent fixing on buildings as part of the structure, so obviously the 'cradlers' are with us to stay.

Are the men specially selected for this work? Are there training schools for 'cradlers'? Gymnasia perhaps, where low-level rehearsals can be staged? I am quite sure that all painters are not necessarily born 'cradlers.' Are there painters and painter-cradlers and are they offered special courses in 'cradling' when they have served their apprenticeship as painters? Come to think of it, where do the acrobats and trapeze artists train and learn their art?

The circus has always been a favourite subject for the artist's canvas, and I think it is now time that artists turned their attention to the building industry. There is every bit as much colour, excitement and movement here as any circus or theatre can provide and, so far as I know, it has not yet been seriously exploited in any form of art. Painters, writers, dramatists—yes, poets, too—come and look !

Book Review

Structural Mechanics

STRUCTURAL MECHANICS. By Samuel T. Carpenter. (New York: John Wiley & Sons, Inc. London: Chapman & Hall Ltd.) Price 76s. net.

THIS is yet another of the many cleverly written and detailed examples of American scholarship in structural theory and analysis. It is also very expensive. The author has compiled this textbook after twenty-five years as a teacher of structural analysis and structural mechanics. Mr. Carpenter has written for the more advanced student since the prerequisite is an elementary structural theory course in determinate structures, with a brief introduction to indeterminate structures and moment distribution.

The volume is a first-class teaching aid and students' text, and may be used with advantage by post-graduates and by practising engineers. It shows how to use mathematical procedures involving differential calculus to solve structural problems, and includes examples and problems for analysis by the reader. It sets out clearly the logical connection between structural theory and engineering mechanics, thus bridging the gap between theory and practice, and fully prepares the student for further study of engineering systems involving structures.

The author includes an introduction to the general principles of vibrations and structures subject to ground motion; deals with combined beam/column action, stability, numerical methods and approximations; and discusses finite difference and buckling. There are detailed sections on the theory of deflection, the basic principles of indeterminate structures, moment distribution, structural dynamics, and arch theory. The main emphasis is placed on the mathematical treatment of structural theory bearing on indeterminate structures, and an introduction to topics from the advanced mechanics of materials. There is a well thought out index. A.D.

Books Received

**** *Books noted in these columns may be obtained on application to the Book Dept., 'The Builder,' 4 Catherine-street, Aldwych, WC2. Cash (to include postage on books to the value of 10s., 9d.; over 10s., 1s. 6d.) should accompany the order.*

BRITAIN'S NEW TOWNS. By Major General A. C. Duff. (Essex: Pall Mall Press, Ltd.) Price 10s. 6d.

AUDELS DOMESTIC WATER SUPPLY AND SEWAGE DISPOSAL GUIDE. By Edwin P. Anderson. (London: Bailey Bros. & Swinfen Ltd.) Price 34s.

THE THATCHER'S CRAFT. (London: Rural Industries Bureau) Price 42s.

Defects in Council Buildings

Question of Who Should Pay

WHEN DEFECTS develop in council buildings, who should foot the bill for the remedial work—the builders, the architect, or the local authority?

This question was raised at a meeting of Southampton Borough Council by CLLR. W. HEAD, who wanted to know why the corporation should bear the cost of work to cure dampness in council flats in French-street. Dampness in one flat, he said, had been there for two and a half years, and previous attempts to remedy it by the builder and architect appeared to have been unsuccessful. He was now informed that a second flat had been affected. He maintained that the cause was either wrong design or faulty workmanship.

CLLR. REG BURNS, chairman of the housing committee, said the trouble was due to rain getting inside the damp-proof courses, which were now being stuck down. That should remedy the defect.

The architect had said that in 28 years' experience of house and flat building, this particular defect had never occurred.

Cllr. Burns' first reaction was that as an error had been made by the architect, the architect should pay; but did the council make their own employees pay for an error? The council regarded these people as conscientious men with considerable ability, who could not always be expected to be perfect any more than he or any members of the council could be.

An error had been made and admitted, but as good employers they considered that the corporation should pay for the remedial work.

National Car Parking Survey

HOW MUCH car parking space is there in Britain? What plans are there for providing more? Which towns will have parking meters? Which ones are planning to build off-street parking garages? How much will the motorist pay to park?

These are some of the questions the British Road Federation is asking more than 400 towns and boroughs in Britain which have been invited to take part in a car parking survey. The results will be published by mid-1961. In addition to throwing light on many aspects of the problem, the survey will show which towns must have off-street parking garages; which are at present too small to justify them; and which are faced with special land value difficulties which make their provision unlikely without some form of assistance.

Kent's Fluctuation Clause Contracts

KENT COUNTY COUNCIL'S buildings committee has reported that, at the moment, it is becoming difficult to obtain sufficient tenders on a fixed price basis with the result that more and more contracts will, for a time, have to contain a fluctuations clause related to rates of wages and prices of materials. The committee says it is keeping the matter under constant review.

'Building Matters'

FEW MEN have played such an important part as Sir Richard Coppock, CBE, in bringing about changes in the building industry during the last half-century. On Tuesday, March 21, in 'Building Matters' (Network Three), shortly before his retirement after 40 years as general secretary of the NFBTO, he and Norman Longley, CBE, past president of the NFBTE and a building employer of long standing, will look back at some of the personalities and problems they have faced together. They will be introduced by Charles Crichton.

Dinner to Sir Richard Coppock

THE CHAIRMAN, Mr. Leonard A. Walden, CBE, FIOB, and council of the National Joint Council for the Building Industry will entertain Sir Richard Coppock, CBE, to dinner on Wednesday, April 26, at the May Fair Hotel, W1. The occasion will be to mark Sir Richard's impending retirement.

RDC Commissions Architects

'IN ORDER to put up houses with new ideas and designs to keep a freshness in the building of the district,' Thedwastre Rural District Council has commissioned three architects to prepare plans for the current house-building programme. The firms are: Mitchell, Weston & Clayton-Smith, 38 Churchgate-street, Bury St. Edmunds; Peter Barefoot, 22 Thorofare, Ipswich; and J. H. Warren, 5 Angel-hill, Bury St. Edmunds.

Design Index Acceptances

THE LISTS OF PRODUCTS accepted by the Council of Industrial Design for inclusion in the Design Index, hitherto issued quarterly, will in future be published each month. Persons interested in receiving these lists regularly should apply to the Design Centre, 28 Haymarket, SW1.

Building Brains Trust at Brighton

THE MEETING to be held by the south-east branch of the Institute of Quantity Surveyors at the Hotel Metropole, Brighton, on March 14 will take the form of a building brains trust. The trust will comprise an architect nominated by the Brighton district chapter of the South Eastern Society of Architects, a builder nominated by the Brighton and district centre of the IoB Discussion Club, and a quantity surveyor and arbitrator nominated by the IQS south-east branch. Questions will be put by Mr. R. E. J. Harding, PPIAAS, FIArb, AMSE, chief surveyor to the South Eastern Electricity Board. The meeting will commence promptly at 7.15 p.m.

Douglas Development Committee

A COMMITTEE OF SEVEN has been unanimously elected by Douglas (Isle of Man) Town Council to work out a long-term policy for the redevelopment of the town. In sponsoring the committee Councillor W. B. Kaneen said that Douglas had grown from a fishing village at the mouth of the river into one of the leading tourist resorts in the British Isles. The future planning, he said, would need the advice of experts in co-operation with the Government. The speaker envisaged development into four distinct precincts: tourist, residential, industrial and commercial.

Architect's Estate

MR. LEONARD ARTHUR CULLIFORD, FRIBA, FRICS, of Beckenham, Kent, left £93,320 gross, £92,855 net (duty paid, £40,241). Among his bequests were £100 each to the National Playing Fields Association, the Council for the Preservation of Rural England and the RICS.

Appointment

MR. STANLEY RIPLEY, FRIBA, DIPL.ARCH., chief architect to the County Borough of Hastings, has been appointed deputy city architect, Chester City and County.

Borough Architect to Retire

MR. C. H. A. WILLETT, FRIBA, borough architect at Reading, is to retire in October on account of ill-health.

Professional Announcements

MESSRS. E. H. C. INSKIP & SON of 29 Goldington-rd., Bedford, have recently opened a branch office in Old Tan-yd., St. Neots, Hunts., under the direction of MR. D. G. YOUNG, ARIBA, who would be pleased to receive trade literature at that address.

MESSRS. MADLIN & MADDISON, quantity surveyors, of 35-37 Grosvenor-rd., Twickenham, have opened a West Midland office at No. 1 Hampden-rd., Malvern Link, Worcs., where they will be pleased to receive catalogues and other trade literature.

MESSRS. DUNCAN, DANNHAUSER & PARSONS, chartered quantity surveyors (in association with Armstrong & Duncan in East Africa, and C. S. Parsons & Partners in the Rhodesias) have opened an office at 14 Evelyn House, 62 Oxford-st., London, W1, and would be glad to receive trade and technical literature at that address.

Coming Events

SATURDAY, MARCH 4

SOUTHERN COUNTIES FEDERATION OF BUILDING TRADES EMPLOYERS.—Exhibition. Corn Exchange, Brighton (until March 11).

MONDAY, MARCH 6

SOCIETY OF ENGINEERS.—'Some Aspects of Prestressed Concrete,' by Mr. H. Kaylor. Geological Society, Burlington House, W1. 5.30 p.m.

FEDERATION OF PAINTING CONTRACTORS.—Annual dinner and dance. Dorchester Hotel, London. 6.15 p.m.

INSTITUTE OF BUILDERS DISCUSSION CLUB (NEWCASTLE AND DISTRICT CENTRE).—'The Education of Architects and its Relation to the Building Industry,' by Mr. J. H. Napper. Royal Turks Head Hotel, Grey-st., Newcastle-on-Tyne 1. 7.15 p.m.

THE GUILD OF BUILDING.—'Timber and Timber Houses.' Lecture by the High Commissoners' Office for Canada. Spencer Arms Hotel, Ferensway, Hull. 7.30 p.m.

TUESDAY, MARCH 7

RIBA.—Joint meeting Institution of Civil Engineers: 'The Problem of Housing Large-scale Plant.' Great George-st., SW1. 5.30 p.m.

HOUSING CENTRE TRUST—'Communal Facilities on High Density Estates,' by Mr. R. J. Cowley. 13 Suffolk-st., SW1. 6 p.m.

REINFORCED CONCRETE ASSOCIATION.—'Prestressed Concrete Bridges,' by Mr. E. W. H. Gifford. Birmingham and Midland Institute, Paradise-st. 6 p.m.

LONDON BUILDERS' FOREMEN'S ASSOCIATION.—General meeting. Kent Room, Caxton Hall, SW1. 6.30 p.m.

RICS.—Annual dinner. Grosvenor House, Park-la., W1. 7.30 p.m.

DAILY EXPRESS.—'Brighter Homes' exhibition. City Hall, Manchester (until March 25).

WEDNESDAY, MARCH 8

ARCHITECTURAL ASSOCIATION.—'Nervi Buildings for the 1960 Olympics,' by Paulo Sica. 34/36 Bedford-sq., WC1. 6.15 p.m.

BUILDING SURVEYORS' INSTITUTE (DEVON AND CORNWALL AREA).—Film: 'Glass.' Duke of Cornwall Hotel, Plymouth, Devon. 7 p.m.

NATIONAL FEDERATION OF PLUMBERS AND DOMESTIC ENGINEERS (EMPLOYERS).—Annual dinner and dance. Park Lane Hotel, Piccadilly, W1. 7 p.m.

INSTITUTE OF BUILDERS DISCUSSION CLUB (BRIGHTON AND DISTRICT CENTRE).—'Introduction to Programming and Progressing for Builders,' by Mr. A. E. Chittenden. South Eastern Gas Bd. showrooms, Church-st., Brighton. 7.30 p.m.

LONDON BUILDING AND ENGINEERING CONTRACTORS ACCIDENT PREVENTION GROUP.—Annual dinner. Agriculture House, Knightsbridge, SW7. 8 p.m.

THURSDAY, MARCH 9

INSTITUTION OF STRUCTURAL ENGINEERS.—'Model Methods, with Particular Reference to Three Recent Applications in the Field of Steel, Composite and Concrete Construction,' by Prof. S. R. Sparkes and Dr. J. C. Chapman. 11 Upper Belgrave-st., SW1. 6 p.m.

FRIDAY, MARCH 10

ROYAL ACADEMY OF ARTS.—Exhibition of the Works of Sir Edwin Landseer. Diploma Gallery, Burlington House. (Open from 10 a.m.-5.30 p.m.)

SATURDAY, MARCH 11

PROVIDENT INSTITUTION OF BUILDERS' FOREMEN AND CLERKS OF WORKS.—Annual ladies' festival. Café Royal, W1. 5.30 p.m.

A Hundred Years Ago

From The Builder of March 2, 1861

'CLOSET' SEATS.—A country surgeon sends us a statement showing the evils that result from these being too high, and urging that 13 or 14 inches is about the proper height. Without going into details, we recommend attention to the advice. In the case of those already fixed, placing a step in front, on which the feet may rest, will be found a wise one.

More Everyday Things

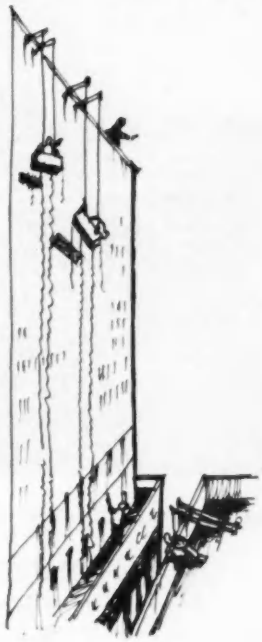
BY ARTHUR W. KENYON, CBE, FRIBA

31. The 'Cradlers'

WE LOOK WITH WONDER and admiration at the trapeze artist as he performs his act high up in the roof of the Big Top and we hold our breath when the music stops for the hair-raising moment when he performs his most dangerous feat of daring. We pay quite handsome sums for ringside seats for this spectacle of the circus, yet there are equally daring feats of trapeze artistry to be seen for free (if I may be allowed current jargon) every day in the streets where British workmen are busy painting buildings from travelling cradles suspended high up in the air on slender ropes.

The ladder has long since disappeared from these operations. Seldom now do we see the old familiar sight of a man stretching over the edge of a ladder, brush in hand, cutting in sash bars or painting downpipes. He now performs his antics from a wooden box called a cradle, fixed at each end by a block and tackle, which in turn is fixed to a cantilever projecting from the roof. The pulley blocks enable him to adjust himself and the cradle to whatever height he requires for his operation

He unties one side at a time with the result that during the process of raising and lowering there are times when the cradle is at an unhappy angle with the horizon. Even when the cradle is firmly in position and in use, it is apt to oscillate in the breeze. Such a performance on the stage would earn gasps of admiring wonder, but the British workman performs his act without spot lights and with no applauding audience. I imagine he does it also without inspection from foreman or architect, for I cannot imagine architects or quantity surveyors risking their precious lives on such a hazard either to inspect or measure.



This cradle device has become so universal as to require a permanent fixing on buildings as part of the structure, so obviously the 'cradlers' are with us to stay.

Are the men specially selected for this work? Are there training schools for 'cradlers'? Gymnasia perhaps, where low-level rehearsals can be staged? I am quite sure that all painters are not necessarily born 'cradlers.' Are there painters and painter-cradlers and are they offered special courses in 'cradling' when they have served their apprenticeship as painters? Come to think of it, where do the acrobats and trapeze artists train and learn their art?

The circus has always been a favourite subject for the artist's canvas, and I think it is now time that artists turned their attention to the building industry. There is every bit as much colour, excitement and movement here as any circus or theatre can provide and, so far as I know, it has not yet been seriously exploited in any form of art. Painters, writers, dramatists—yes, poets, too—come and look !

Book Review

Structural Mechanics

STRUCTURAL MECHANICS. By Samuel T. Carpenter. (New York: John Wiley & Sons, Inc. London: Chapman & Hall Ltd.) Price 76s. net.

THIS is yet another of the many cleverly written and detailed examples of American scholarship in structural theory and analysis. It is also very expensive. The author has compiled this textbook after twenty-five years as a teacher of structural analysis and structural mechanics. Mr. Carpenter has written for the more advanced student since the prerequisite is an elementary structural theory course in determinate structures, with a brief introduction to indeterminate structures and moment distribution.

The volume is a first-class teaching aid and students' text, and may be used with advantage by post-graduates and by practising engineers. It shows how to use mathematical procedures involving differential calculus to solve structural problems, and includes examples and problems for analysis by the reader. It sets out clearly the logical connection between structural theory and engineering mechanics, thus bridging the gap between theory and practice, and fully prepares the student for further study of engineering systems involving structures.

The author includes an introduction to the general principles of vibrations and structures subject to ground motion; deals with combined beam/column action, stability, numerical methods and approximations; and discusses finite difference and buckling. There are detailed sections on the theory of deflection, the basic principles of indeterminate structures, moment distribution, structural dynamics, and arch theory. The main emphasis is placed on the mathematical treatment of structural theory bearing on indeterminate structures, and an introduction to topics from the advanced mechanics of materials. There is a well thought out index. A.D.

Books Received

**** *Books noted in these columns may be obtained on application to the Book Dept., 'The Builder,' 4 Catherine-street, Aldwych, WC2. Cash (to include postage on books to the value of 10s., 9d.; over 10s., 1s. 6d.) should accompany the order.*

BRITAIN'S NEW TOWNS. By Major General A. C. Duff. (Essex: Pall Mall Press, Ltd.) Price 10s. 6d.

AUDELS DOMESTIC WATER SUPPLY AND SEWAGE DISPOSAL GUIDE. By Edwin P. Anderson. (London: Bailey Bros. & Swinfen Ltd.) Price 34s.

THE THATCHER'S CRAFT. (London: Rural Industries Bureau) Price 42s.

Defects in Council Buildings

Question of Who Should Pay

WHEN DEFECTS develop in council buildings, who should foot the bill for the remedial work—the builders, the architect, or the local authority?

This question was raised at a meeting of Southampton Borough Council by CLLR. W. HEAD, who wanted to know why the corporation should bear the cost of work to cure dampness in council flats in French-street. Dampness in one flat, he said, had been there for two and a half years, and previous attempts to remedy it by the builder and architect appeared to have been unsuccessful. He was now informed that a second flat had been affected. He maintained that the cause was either wrong design or faulty workmanship.

CLLR. REG BURNS, chairman of the housing committee, said the trouble was due to rain getting inside the damp-proof courses, which were now being stuck down. That should remedy the defect.

The architect had said that in 28 years' experience of house and flat building, this particular defect had never occurred.

Cllr. Burns' first reaction was that as an error had been made by the architect, the architect should pay; but did the council make their own employees pay for an error? The council regarded these people as conscientious men with considerable ability, who could not always be expected to be perfect any more than he or any members of the council could be.

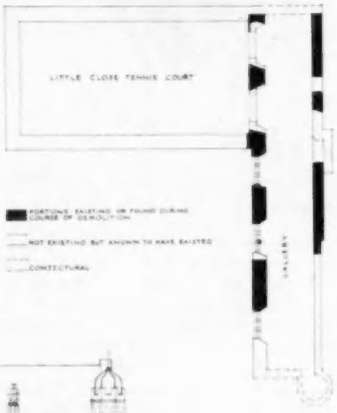
An error had been made and admitted, but as good employers they considered that the corporation should pay for the remedial work.

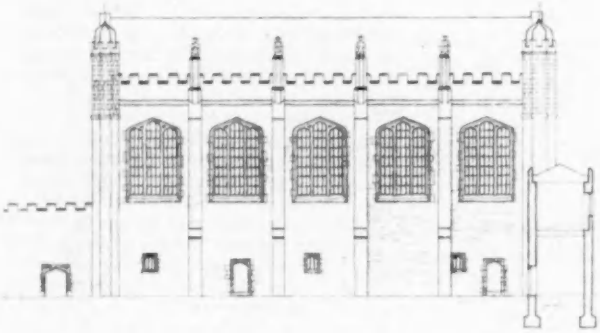
The Palace of Whitehall

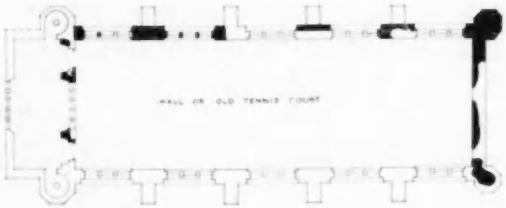
Interesting Discovery of Original Tudor Buildings

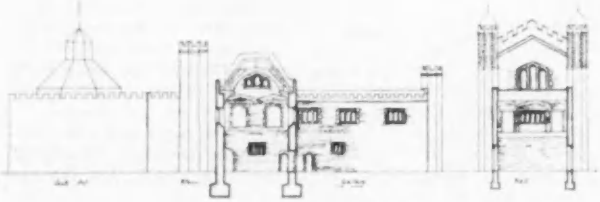
A late 17th century painting showing the buildings on the west side of Whitehall as seen from what is now St. James's Park

SUBSTANTIAL REMAINS of some of the buildings which Henry VIII erected in Whitehall for his recreation and amusement and for that of his court have been found by the Ministry of Works during reconstruction of the Treasury offices in Whitehall. The finds consist of most of one wall of a large hall for entertainments, later converted into a tennis court, practically the whole of a corner turret of this building, the end wall of another tennis court nearby and a two-storeyed gallery which connected the two buildings. So









Above is a plan of Whitehall Palace at first floor level (Scale: approximately 28 ft.=1 in.) and (inset) a site plan showing the relation with Whitehall and Downing-street. Top left is a reconstruction of the west elevation of the old tennis court (1530), and beneath it a drawing of the palace from the park side looking north. The shaded areas represent portions of the building found during reconstruction of the Treasury Offices

important are these remains as a link with Tudor Whitehall that the Ministry of Works is to incorporate parts of them in the new offices.

After Henry VIII appropriated Whitehall Palace in 1528 he erected a series of buildings on the west side of Whitehall to house one or more tennis courts, a bowling alley, a cockpit, and a hall for entertainments. Something of their character was known from early records and from 17th and 18th century paintings. The hall, or old tennis court, ran north-south, roughly parallel with Whitehall. The remains found are of the west wall, the largest section recovered being about 30 ft. by 16 ft.—one of six bays of the hall and including a great stone window some 20 ft. high and 8 ft. broad. What was the north-west turret of this building still stands to a height of at least 40 ft., its upper part being faced with a decorative pattern of flint and stone.

The Whitehall front of this building was destroyed by Sir Charles Barry when he rebuilt the Treasury offices in 1847, but it was suspected that there might be some remains of the park side of the building; that so much should have survived has come as a surprise. Furthermore, the iron reinforcement of floors nearby suggests that Barry preserved the west wall on purpose. As a result of his forbearance it is now possible to trace the size of the original building and its general character and from the reconstruction drawing it may be seen that the building bears a strong resemblance to the great hall at Hampton Court.

Of the smaller tennis court which stood nearby, only the north end wall remains, but this stands to almost its full height and still has its original windows, one on the ground floor retaining its Tudor ironwork. The remainder of this tennis court building was destroyed in the 18th century, but the end wall was left little altered, although covered with plaster until it was discovered recently. The two-storeyed gallery was known to have survived all subsequent rebuildings but stripping the wall coverings has revealed most of the original window openings and proved that the 'Tudor' windows incorporated in later rebuilding were fakes. Part of a stone fireplace has also been found in the upper part of this gallery.

Another reconstruction drawing shows the position of Whitehall, formerly called the Street; the south end of the Hall, as it must have looked in Henry's days; a two-storeyed gallery (the cockpit passage), which connected the hall not only with the Tudor cockpit, but also with the end (all that survives) of the closed tennis court. It can be seen that the latter building was formerly roofed in the some manner as the hall at Hampton Court. This royal recreation ground was approached from Whitehall Palace (which stood where the new Government offices now are in Whitehall-gardens) by an elaborately decorated two-storeyed gallery which crossed the street through the Holbein Gate, which then closed the north end of the Palace precinct.

In the rebuilt Treasury offices, part of the wall of the Tudor hall and one of its great windows will be incorporated at the end of a series of corridors. These will be visible through inspection panels at the various floor levels, the face of the wall being lit from below. The two-storeyed passage will once again form one of the main corridors of the new building. The end wall of the small tennis court overlooks Treasury-green, and people walking from Downing-street to Horse Guards Parade through Treasury-passage will be able to see it and the exterior of cockpit passage when reconstruction is finished.

London County Council

Increased Estimates for Education and Housing

AT ITS BUDGET MEETING on February 28 the Council considered the report of its Finance Committee on the summary of the estimates of its capital and maintenance expenditure for 1961-62; at four subsequent meetings the Council will consider the estimates for each Committee separately and in detail.

The Council will be asked to approve overall estimates of net capital expenditure amounting to £35,597,000 (including £2,100,000 for contingency provisions) and £5,550,000 for loans to be advanced by the Council; these estimates are for the purpose of obtaining spending powers in the annual Money Bill which has to be submitted in the current session of Parliament. The Council's own requirements for capital expenditure in the year are estimated at £40,635,000 gross (£34,202,000 net), the net figure being an increase of £2,095,000 over 1960-61.

The gross estimates include £6,750,000 on education, an increase of £750,000; £850,000 on welfare, an increase of £370,000; £15,750,000 for housing, a decrease of £1,000,000 or an increase of £500,000 when allowance is made for the amounts now included under New and Expanding Towns Committee; £3,400,000 for main drainage, a decrease of £25,000; £6,000,000 for road improvements, as for the previous year. Other increases of expenditure are £345,000 for the completion of the Royal Festival Hall and preparatory work on the new small hall, art gallery and associated work on the South Bank, and £200,000 for increased expenditure on the National Recreation Centre at the Crystal Palace. Promise of £2,500,000 is also made for acquisition and development under agency agreements under the Town Development Act, 1952.

Review of Development Plan

1,137 OBJECTIONS were received by the Minister of Housing and Local Government to the LCC's first 5-yearly review of the Development Plan. A public local inquiry was held which sat for 91 sessions between October 4, 1960 and January 12, 1961. Nearly half of the objections were heard at the inquiry; 70 were dealt with by written representations; over 50 were deferred by the Minister and more than 150 were formally withdrawn. 300 objectors, who had lodged objections and been offered an opportunity of being heard, did not in fact appear at the inquiry leaving their objections to be considered by the Minister without further amplification of the grounds upon which they had been lodged.

During the course of the inquiry, the Council submitted 84 modifications to its proposals, mainly for correcting errors that had occurred in drawing the maps or reflecting changes of circumstance since the proposals were submitted to the Minister. In 38 instances these modifications affected proposals to which there had been objections; 55 objections were met as a result of modifications.

Other Matters

BUILDINGS OF EXCESS HEIGHT, ETC.: A new edition of the Code of Practice for guidance for applicants requiring the Council's consent under the London Building Acts for the erection of high buildings or of buildings over a certain size to be used as warehouses or for trade or manufacture is being prepared and will be available about the middle of March. The price will be 1s. 6d.

ROYAL COMMISSION ON LOCAL GOVERNMENT: The Royal Commission on Local Government in Greater London published their report in November, 1960. The Minister of Housing and Local Government has asked for the Council's view, which is that 'the existing organisation of the London County Council should be preserved. The distribution of functions proposed would cause an unjustifiable upheaval, result in the loss of many special services and gives no assurance that the services for the citizen would be bettered.'

ST. PAUL'S CATHEDRAL APPEAL: The Town Planning Committee are recommending the Council to make a contribution of £5,000 towards the maintenance of the fabric of St. Paul's Cathedral. A donation of £3,000 was made in 1956.

ELECTRIC PASSENGER LIFTS: Tenders are to be invited from specialist firms for the supply of 60 electric passenger lifts which will be required during the financial year 1962-63 for housing development schemes. The estimated cost is £180,400.

Obituary

Sir Ernest Holloway

SIR ERNEST HOLLOWAY, KCB, OBE, Director-General of Works, Air Ministry, from 1939 to 1947, died in hospital at Shoreham, Sussex, on Monday night. He was 73. After service in the RFC and RAF in the First World War he joined the Air Ministry Directorate of Works as a civil engineer in 1920, and after serving in various posts at home and abroad was appointed Assistant Director of Works in 1934 and Deputy Director in 1937. In July, 1939, he succeeded Colonel J. F. Turner as Director-General.

Training for Site Management

Discussions at the LMBA Course at Sundridge Park

FROM A CORRESPONDENT

FOR the past four years, the London Master Builders' Association has held Standard Management Courses at the Sundridge Park Management Centre at Bromley, Kent, and over 20 of such courses, comprising approximately 350 senior executives, have been held since their inception in 1957. Originally confined to two and a half days, they have now been extended to four, one of which is devoted to syndicate discussions, and on this day the members of the course are temporarily divided into three syndicates, for each of which there is appointed a chairman and a reporter. These syndicates discuss, separately and simultaneously, a problem of management which their reporters finally present in plenary session. The presentation of the reports is followed by a general discussion.

At the January course this year, the problem to be discussed by the syndicates was 'Training for site management.' The syndicates were required to produce an outline training scheme covering this aspect of management as a whole.

Obviously, in the time at their disposal (approximately six hours) it was impossible for the syndicates to produce a detailed plan of their proposals, nor was this the intention. The basic object was for the members of the course to produce as many ideas as possible and they were, in fact, urged to be as revolutionary in their thinking as they wished. An essential feature of the reports and the discussions is that they should be completely uninhibited and it was further stressed that the views which they put forward should be their own personal opinions.

Consequently, the report of this day's work at the Conference which is printed below is purely the opinions of those who took part and does not in any way reflect an official policy or a definite line of future action. The problem with which they were faced is obviously one which would well merit the attention of a study group over a considerable period, and here it is worthy of mention that the London Master Builders' Association has already set up a study group from members of the National Contractors' Group to discuss in detail the training of site agents, while a sub-committee of the LMBA Education Committee, working in close liaison with the study group, is also about to direct its attention to the problem of the training of general foremen. Some of the ideas, however, produced by the syndicates in their short, but very concentrated, session contain matters of interest and discussion.

Points of Common Agreement

The report is divided into a summary of those observations which were common to all three syndicates and, secondly, of the individual syndicate reports.

1. All syndicates were agreed that a revision of training for site management was long overdue.

2. They considered that the Institute of Builders should be the sole professional body of the building industry and that it should occupy a status comparable to that of the chartered professional bodies, so that the 'professional' builder may become a reality.

3. The title 'General Foreman' should no longer be used, and a more suitable designation, which should give an enhanced status to what is, in fact, a managerial position of considerable importance, should be devised. One syndicate suggested the title of 'Site Supervisor,' but this was not felt to be wholly satisfactory. The difficulty that confronted the syndicates in this connection was that on a large contract the Site Agent or Manager might be assisted by two or three General Foremen, and it was consequently difficult to define duties which might imply full control of a small site and also a secondary level of control on a large site. In the time available the syndicates were not able to suggest a satisfactory designation but were insistent that new names ought to be found for site management at all levels.

4. All syndicates agreed upon the basic qualities of character and personality which the general foreman should possess. These they listed as:

(1) Ability to supervise all work on site in accordance with the specification.

(2) Up-to-date technical knowledge.

(3) Ability to delegate and to maintain satisfactory liaison with head office.

(4) Ability to exercise the management tool of 'communication.'

(5) Considerable ability to co-ordinate, particularly in view of the increasing number of nominated sub-contractors.

(6) Ability to control labour.

(7) A consciousness of the factors of cost and time.

(8) A full knowledge of the Working Rule Agreement and of safety regulations.

Further specific qualities are mentioned in individual reports.

5. All syndicates agreed that the ladder towards General Foremanship must not be by the crafts alone, and that young trainees who have studied by means of National Certificates or Diplomas should come together with the craft-trained men at the level of Assistant General Foreman.

6. All syndicates agreed that a man must serve a considerable period as assistant in any grade.

Interpreting Syndicate Reports

An explanation may be necessary of the terms 'indentured student' and 'articled pupil' which are used in the syndicate reports. They refer to the methods of entry of training in the LMBA scheme for administrative trainees.

The 'indentured student' is the school leaver of approximately 17 with at least three GCE 'O' levels (Mathematics and English language being essentials) who is indentured for five years, whose technical training is by means of day release, and who should obtain the Higher National Certificate at the end of his training.

The 'articled pupil' is the school leaver of approximately 18 or 19 who, after two years in the Sixth Form, has obtained two 'A' levels (preferably in Mathematics and Physics) and who is articled for four years so as to take the Higher National Diploma by means of a sandwich course.

Syndicate I

The two managerial positions discussed were those of General Foreman and Site Agent.

General Foreman

It was considered that this could be reached by two routes:

Route 1.—After three years' Craft Apprenticeship and the attainment of the City and Guilds Craft Certificate, selected apprentices would be transferred to the ONC Course, and signed up as Indentured Students under the LMBA scheme. They should then follow the normal training of the LMBA Indentured Student during the next three years—i.e., a period of experience in each of the main departments of the Head Office, with day release or block release for technical studies, until the attainment of the ONC.

On the attainment of the ONC the trainee should be appointed as Assistant General Foreman, and here he would meet, at approximately the same age, his 'opposite number' who had progressed by Route 2.

Route 2.—This would be the usual route of the present LMBA Indentured Student (ONC plus HNC). However, the first year of an Indentured Student's training should be spent on site, rather than in the office. For the remainder of his training, he would pass through the various office departments, as he does at present, which the syndicate recommends should include Work Study, Planning, Costing, Surveying and Estimating. The Indentured Student would, at the end of his training, have the opportunity of continuing in the office (as the majority do at the moment) or of electing for site management as an Assistant General Foreman.

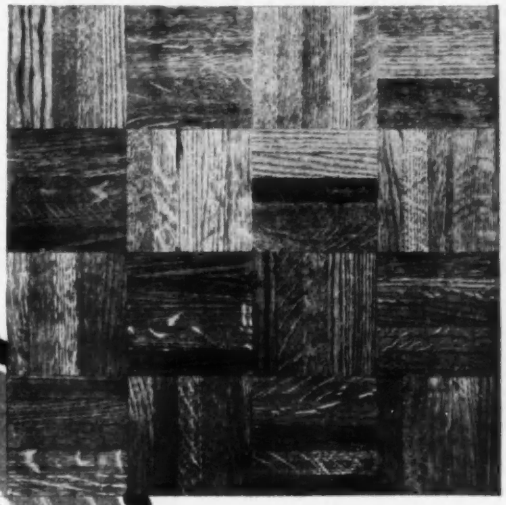
Both 'routes,' therefore, join at this level, and all Assistant General Foremen should commence to study (if they have not already begun to do so) for the Final Examination of the Institute of Builders.

Traditional Charm in the Modern Manner

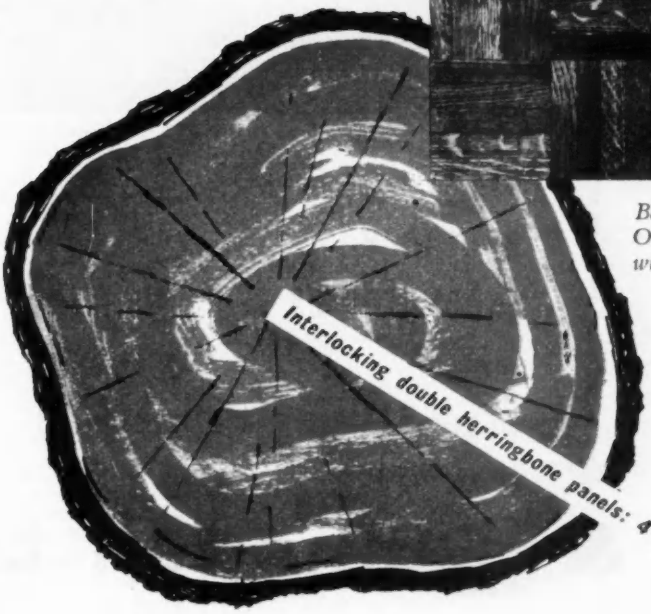
MARLEY Mosaic

HARDWOOD FLOORING

Precision-made and assembled in ready-to-lay panels, this durable parquet flooring is suitable for both domestic and commercial applications.



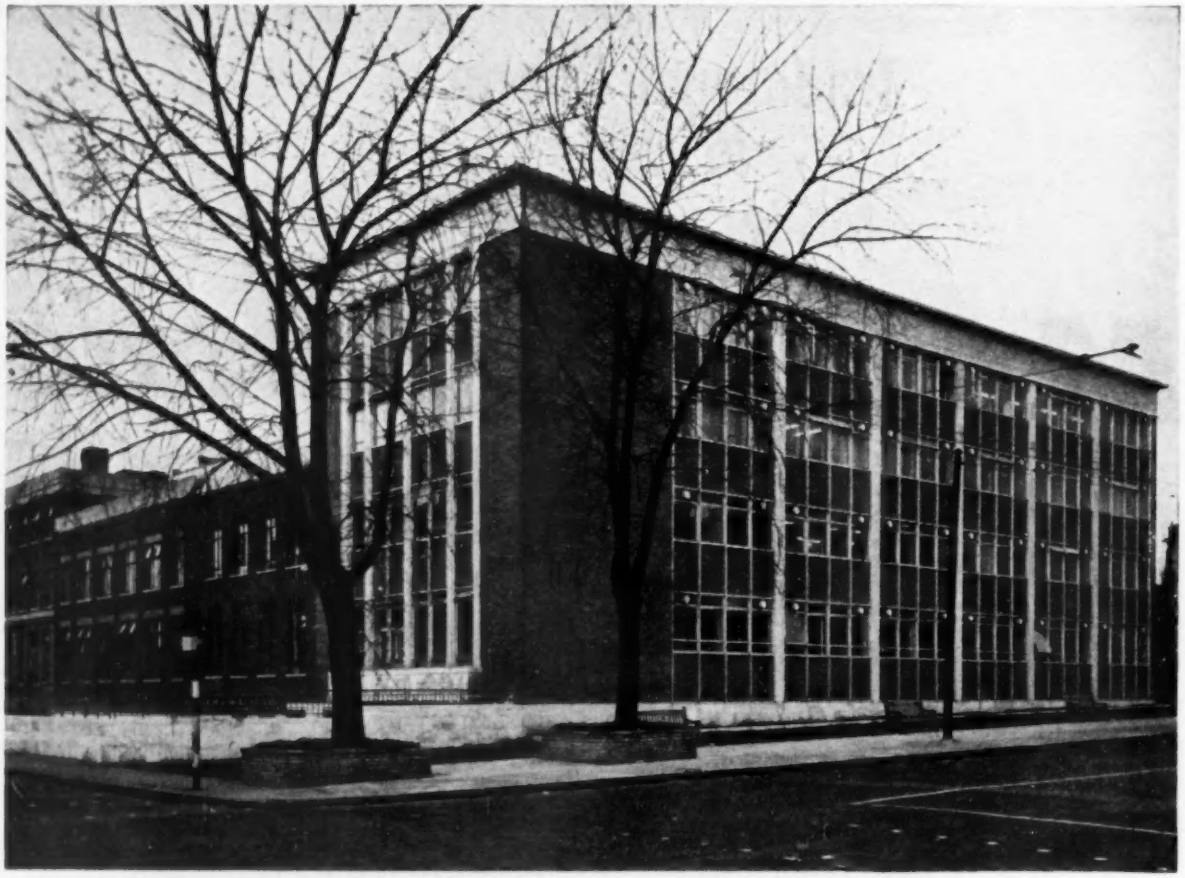
Basket Weave Panels 18" × 18"
Oak · Sapele · Idigbo · Sapele and Ramin with felt backing if desired



Interlocking double herringbone panels: 4 per square yard · Oak · Sapele · Idigbo

Marley Supply and Fix Service operates throughout the country. Complete technical details are available on request.

MARLEY SEVENOAKS · KENT · Sevenoaks 55255
London Showrooms · 251 Tottenham Court Road · W1



Architect: J. Francis Smith, F.R.I.B.A., F.R.I.C.S.

NEW
RESEARCH
LABORATORIES
for
Messrs. Hilger & Watts Limited

Mullen & Lumsden Ltd.

England's Leading Builders
for
Service and Reliability

LONDON SOUTHAMPTON

Site Agent

The Site Agent should possess the same qualities as the General Foreman to a higher degree and should be able to take his place as a professional man equally with Architects, Quantity Surveyors and Consulting Engineers.

He will attain the position by three routes: (a) Promoted General Foreman or Dip Tech (Route 3); (c) University (continuation of Routes 1 & 2); (b) HND Graduation (Route 3); and these three categories will meet together at the level of Assistant Site Agent.

Promotion from Assistant Site Agent to Site Agent should be dependent upon the attainment of the qualification of AIOB.

Remuneration of all trainees, especially those of high educational standard, must be at a realistic level.

Syndicate II

The members of this syndicate considered that management training should also be given to Trade Foremen, in which they included Gangers.

General Foreman

Route 1.—Qualifications for Trade Foremen should include an Advanced Craft Certificate, together with a short three- to four-day management appreciation course in the employer's time.

Suitable Trade Foremen will progress to Assistant General Foremen, where (as in Syndicate I) they join up with—

Route 2.—the Indentured Student who has followed the ONC and HNC courses, and also the Articled Pupil with an HND.

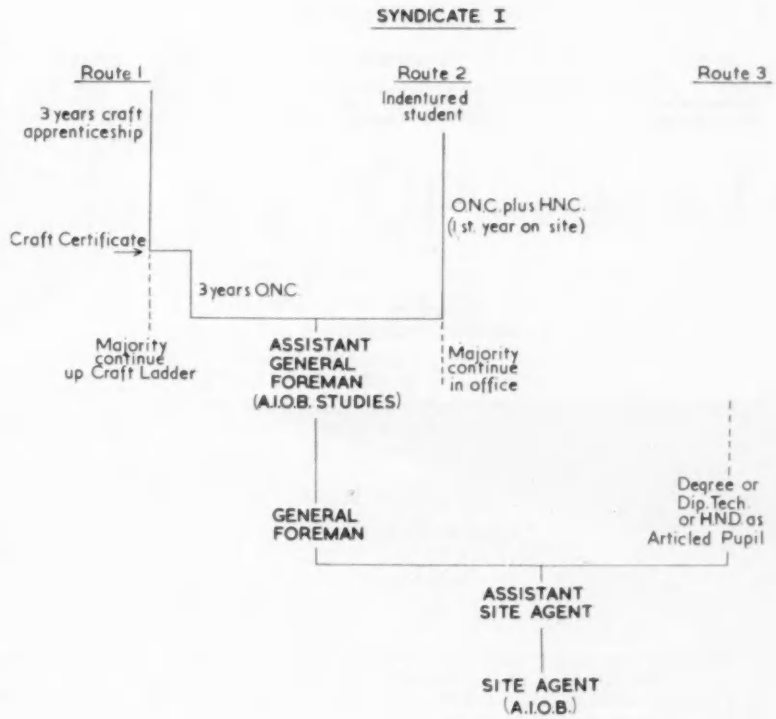
While acting as Assistant General Foreman both categories will follow the existing Certificated General Foremanship Course by Block Release.

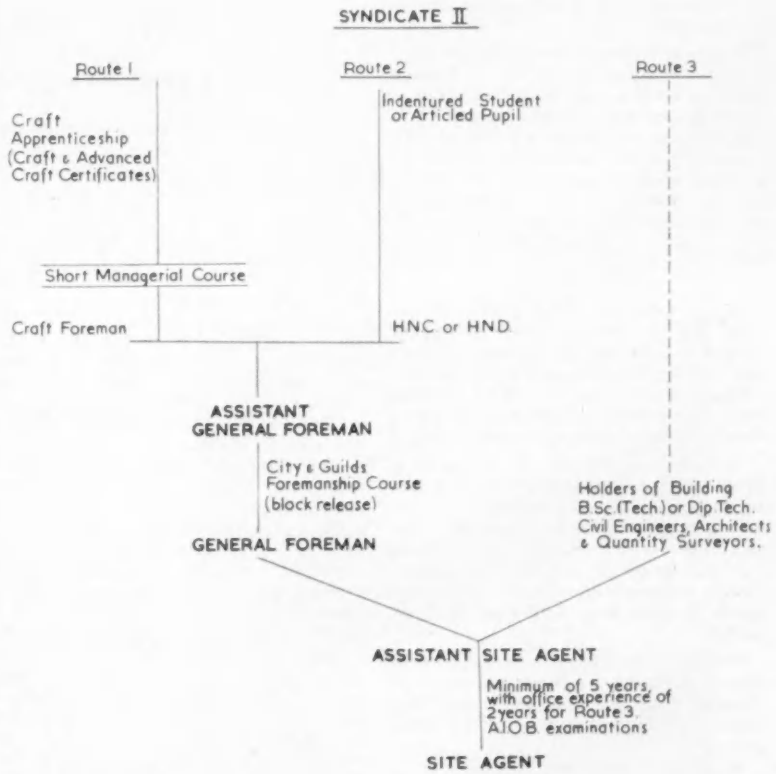
(The main differences between Syndicate I and II at this point are that Syndicate II envisages the change-over from the craft stream later than Syndicate I, and retains the existing City and Guilds Certificated Foremanship Course (by block release) for both the Craft and the Indentured Student/Articled Pupil streams. It does not separate the Indentured Student from the Articled Pupil, as does Syndicate I).

They recommend that, during the common period as Assistant General Foreman, the man who has followed the craft stream should be introduced to a supervisory knowledge of all trades other than his own, while the ex-Pupil or Student will be introduced to all trades.

It may be that at the level of General Foreman, the majority (particularly including those from the stream which has originally come up from the crafts) will reach their ceiling. Outstanding men will continue to the grade of Site Agent.

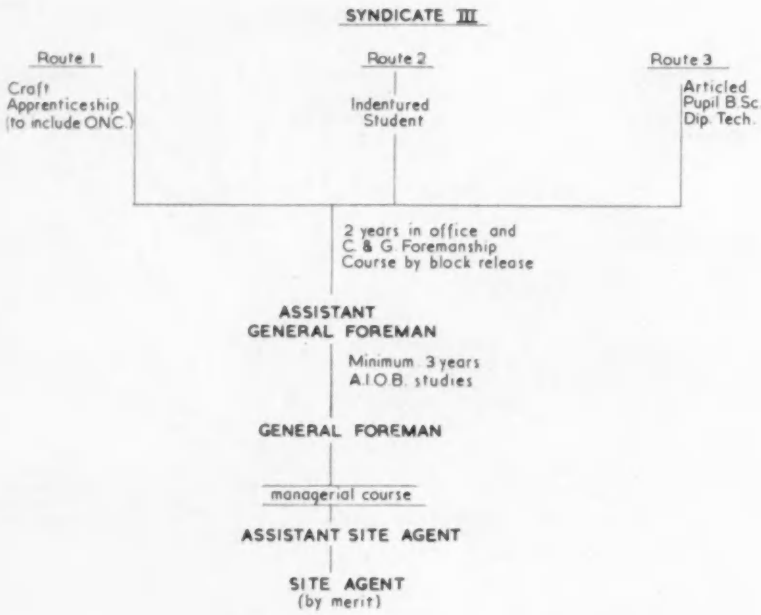
Site Agent.—The syndicate agrees with Syndicate I that the Site Agent should possess the qualities of the General Foreman in a higher degree, but stresses that he should possess, in addition to high administrative ability, a wide knowledge of managerial techniques, such as financial control, other than those primarily associated with actual building on site.





The Site Agent should be recruited from four sources: (a) Promoted General Foreman (who will probably be originally from the Indentured Student/Articled Pupil stream); (b) BSc(Tech.) or Dip Tech (Route 3); (c) Civil Engineers (Route 3); (d) Architects, Quantity Surveyors, etc. (Route 3).

These categories will meet together at the Assistant Site Agent level. Categories (b), (c) and (d) will, over a period of five years, spend approximately two years in



the office and three years on site, alternating at suitable intervals, since they will have little or no knowledge of office procedure. It is of interest to notice that this Syndicate would include men originally trained in the allied professions as potential Site Agents.

Frequent refresher courses (particularly for those who remain at Trade or General Foreman level) are advocated as occasion demands, and such courses must be standard practice throughout the firm so that, if a man is sent on a refresher course, he should consider this as normal procedure, and not suspect that he is being singled out because of his lack of knowledge.

Syndicate III

Route 1.—This syndicate believes that only the exceptional craft apprentice should be selected for managerial posts, and that he should be selected from those who are able to take the ONC, together with their craft qualification, during their apprenticeship or soon after completing it.

The next stage would be two years at Head Office, spending six months in each of the following departments: Costing and Bonus; Surveying; Planning; Commercial Procedure (Buying, etc.). During this time he would study for the City and Guilds Foremanship Course and would meet up with those following Routes 2 and 3.

Following on these two years he would, for a minimum of three years, act as Assistant General Foreman and commence studying for the AIOB examination.

Route 2.—Indentured Student.

Route 3.—BSc, Dip Tech, Articled Pupil.

Site Agent.—Transition from General Foreman to Assistant Site Agent should be by merit and must include an intensive management course.

It will be noticed that the main difference between this and the other two syndicates is that the holder of a degree or a Dip Tech must start at the Foreman level, and not at that of Assistant Site Agent.

The various reports show a great variety of opinion, and this may be due to the fact that representatives from very large and very small firms were present, whose problems are basically different. It is interesting to compare, for example, the different opinions as to the progress of the craft-trained man towards managerial responsibility on the site. Syndicate I suggests that he should be picked out after three years craft apprenticeship—before, in fact, his indentures are completed—and at about the age of eighteen; Syndicate II would have him continue with the tools to the level of Craft Foreman; Syndicate III select him only after he has obtained an Ordinary National Certificate in addition to his craft qualifications.

Equally diverse are the values placed on the higher qualifications such as the Higher National Diploma, which is equated with a degree on the one hand, and the Higher National Certificate on the other. There is no doubt that the value and purpose of these higher qualifications must be worked out more realistically, and the LMBA Study Group and Sub-Committee have some very large problems on their hands.

Firm Price Tendering

NJCC's Statement and National Federation's Comments

A NEW STATEMENT on firm price tendering by the National Joint Consultative Committee of Architects, Quantity Surveyors and Builders was issued at a conference called last week by the National Federation of Building Trades Employers to enable members of the trade and technical Press to meet the new National President, MR. FRANK RUSSON, FIOB.

The statement says that the NJCC considers it desirable to restate the obligations of all those concerned with firm price tendering. The conditions to be observed in firm price tendering have, it is pointed out, been endorsed by the Ministry of Works.

The statement continues: 'When a firm price tender is submitted prompt consideration should be given to it, and a decision communicated to the tenderers as soon as possible within a maximum period of two months. Facilities should immediately be given to the successful tenderer to enable him to put the work in hand. It must be recognised that the tender is calculated with reference to the prices ruling at the time of the tender and to the availability of staff, labour, materials, and plant. The builder can only gauge the market for labour and materials over a limited period, so that the estimated contract period for a firm price tender should in no circumstances exceed two years.

'There must be thorough planning of each project. The builder should be provided immediately by the professional advisers with sufficient information to enable him to programme the job. All drawings, details and other instructions should be made available to the builder as required for him to start and maintain the orderly progress of the works. The builder should be notified promptly of the nominations of sub-contractors and suppliers whose tenders should be on a firm price basis wherever possible. Variations should be kept to a minimum.

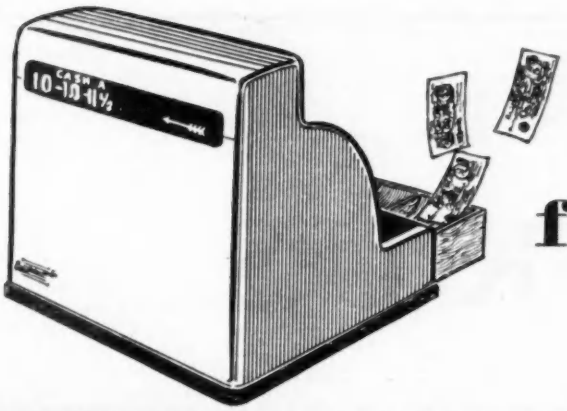
'If full advantage is to be obtained from firm price tendering, the above conditions are of vital importance. Failure to comply with these conditions undermines the whole basis of a firm price contract.*'

'Builders' Raw Deal'

MR. PETER TRENCH, Director NFBTE, said that builders all over the country felt that they were having a raw deal over the way that firm price tendering was being operated. Nevertheless, the Federation was continuing to back the principle of firm price tendering as they believed that it was, ultimately, good for the country as well as for the builders.

Asked whether any progress had been made with the suggestion that a statement on the obligations attaching to firm price tendering might be made to form part of the contract, Mr. Trench said that

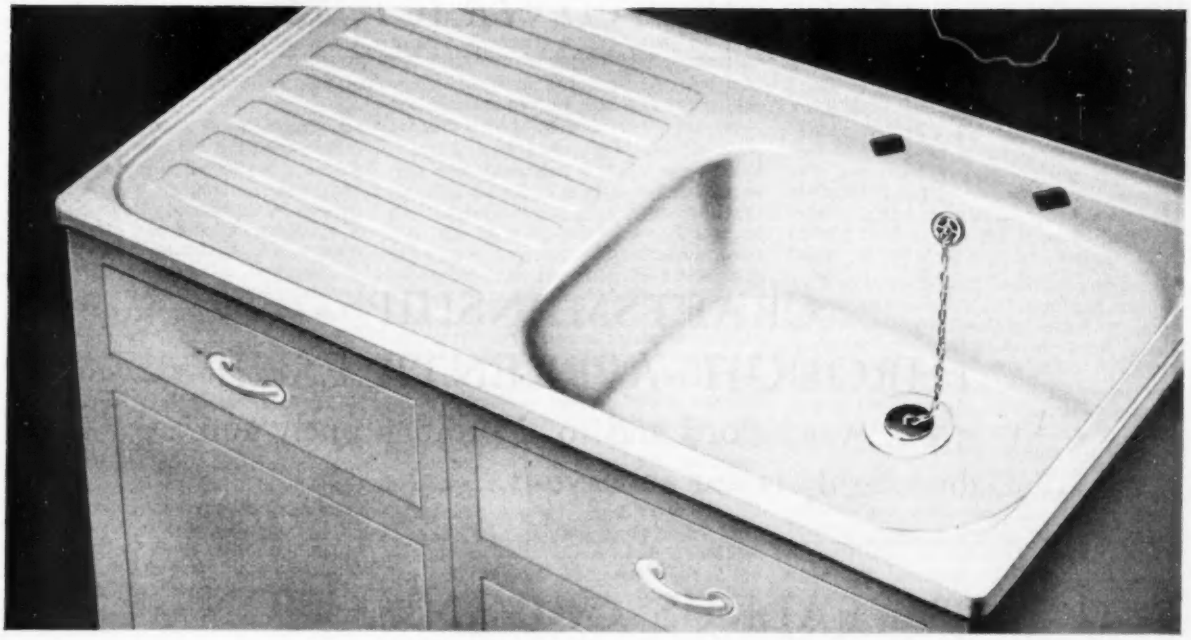
* Attention is also drawn to the Code of Procedure for Selective Tendering published by the Committee in 1959 and obtainable from the Committee at 66 Portland-place, London, W1.



A wonderful range of sink tops — vitreous enamelled — designed for kitchens large or small.

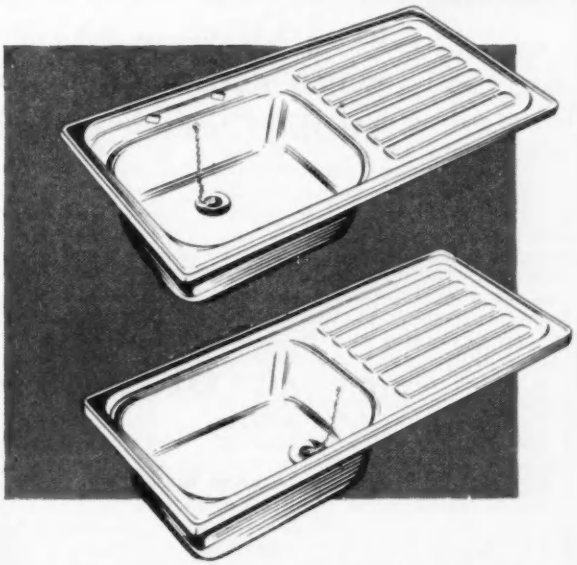
for TOP sales !

Varying colour choice — white, ivory, pale green, pale blue — and priced to be within reach of all your customers.



FOR PILLAR TAPS. 42″ x 21″ model, with tap holes, with or without overflow. Can also be supplied with drainer on left. Bowl size 20″ x 15″ x 8″ deep.

REVERSIBLE MODEL. 42″ x 18″. Without overflow. Can be used with drainer on left or right. Bowl size 20″ x 15″ x 8″ deep. Actual overall size 42½″ x 18½″.



'LUXURY' for sink units at the right prices

THE WELSH TINPLATE & METAL STAMPING CO. LTD., LLANELLY, CARMS.

FALKUS
BROS. LTD.

BUILDING CONTRACTORS

CRAFTSMANSHIP
THROUGH APPRENTICESHIP
is our watchword and to do things finely and thoroughly is our endeavour.

The FALKUS ORGANISATION
has achieved in no small degree the satisfaction which derives from good workmanship and a worthy Clientele gives hearty assent.

46 · BISHOPSGATE · E.C.2

Telephone
London Wall 1876 Bishopsgate 3381-4 (4 lines)

Telegrams
"Falbrowok, Spimark, London"

the whole question of qualifying contracts in this way was to be discussed 'in a fortnight's time.'

In reply to a question as to why, if builders were happy about firm price tendering before the war, they were not now, the PRESIDENT said that, to begin with, most materials were now 'rising rapidly in price.' Furthermore, builders did not know now whether they would be able today to get the labour they needed and they could not expect to get their materials at the prices quoted at the time of going to tender.

MR. TRENCH said that in the prevailing situation the first prerequisite was quick acceptance of the tender, but all too often builders were kept in suspense for a long time. Secondly, the whole job should be properly planned, so that the work could go ahead without a hitch. On this point architects were finding it difficult to provide all the details needed on time because they could not get the staff they needed.

Asked his views on house design, the PRESIDENT said that the time was coming when houses would be judged more on their appearance, collectively and individually, than on their standard of construction. On the role of architects in improving design standards, MR. TRENCH said that they might be surprised to learn that at the present time 75 per cent of new houses erected were in fact architect-designed.

Plastering Techniques

MR. TRENCH referred to the forthcoming conference on plastering techniques, to be held in London at a date to be announced. Many might say that plastering was a trade that was on the way out, but recent evidence from the United States, where they believed that plastering could still do many things that could not be achieved in any other way, did not support this view. Helped by mechanisation, plastering was something that was here to say for a long time.

The 'appalling standard' of joinery today was the subject of another question. The PRESIDENT thought that the blame lay in the quality of timber available. Before the war they had a lot of very good timber from Russia, but not so much today. Where good quality timber was available builders could not always afford to use it.

In answer to another question, MR. RUSSON agreed that labour-only sub-contracting constituted a threat to the small house builder. With the present shortage of labour, however, it was difficult to know what could be done about it.

On the subject of refreshment breaks, MR. TRENCH thought that the employers' terms, following the recent hours and wages agreement (to come into force next October) had been 'misunderstood.' There was no objection to operatives having a break, he said, but this should not be a paid break.

Urban Redevelopment

Answering questions on the part that private builders could play in urban redevelopment, the PRESIDENT said that only the local authorities had the powers to acquire sufficiently large sites to make this practicable, but he thought that the builders should play their part in such development. This, he suggested, ought to be a matter for the central government, which would make the necessary funds available to the local authorities, who could then ask builders to submit tenders for schemes of redevelopment. If the difficulties arising from the fact that a piece of urban land having 'a hundred owners,' which in turn meant dealing with 'a hundred solicitors,' could be overcome then private enterprise would have a chance to take part in urban redevelopment.

Federation of Master Builders

New House-Builders' Committee Formed

'IT TAKES as long to get planning consent for an estate as it does to build it.' This was stated by MR. S. C. PARRISH, President of the London Region, Federation of Master Builders, at a house builders' luncheon following a meeting at Grosvenor House on February 22. The purpose of the meeting was to consider the formation of a house-builders' section.

Mr. Parrish said: 'We have for some time past advocated that not only should planning be taken almost entirely out of the hands of local authorities, but also that the appeals procedure should be drastically amended. On the one hand we believe that representative committees should be established operating in the areas now covered by area planning offices, thereby eliminating any possibility of purely local prejudice, by whom all decisions ought to be given within a prescribed period, failing which consent would be automatic, as is the case with by-law applications. This would create a positive approach to the problem, instead of the present negative attitude.

'Second, appeals could be conducted through local appeals committees. This, as will readily be appreciated, would undoubtedly remove the greater part of the large waiting list and would mean that the situation created by a shortage of Ministry Inspectors and staff would be overcome.

'I wonder how many people realise that in general terms it takes as long to get planning consent for an estate as it does to build it, and that by virtue of this alone, having in mind the present high cost of land, is equivalent to increasing the price by £50-£75 per unit by way of interest charges.'

On the subject of the Federation's proposed house-builders' section, Mr. Parrish said that there were now in London alone enough members to form, first, a separate committee charged with the duty of studying ways and means in which to assist house builders especially, with the ultimate aim of setting up within the Federation a housing section or division. This, they were confident, would ultimately attract members from all parts of the country, creating a strong, virile body, able to advise and assist house builders in many ways.

'We aim to make a special study,' Mr. Parrish added, 'of future housing trends and to keep abreast of every new development. Every effort must be made to ensure that not only will housing standards be maintained but costs will be kept down to the minimum.' [It is understood that the proposed new house builders' section is not intended as a rival to the National House-Builders Registration Council, and would not attempt to duplicate the Council's functions.]

The guest speaker, SIR BRUCE WYCHERLEY, MC, FCIS, managing director, Abbey National Building Society, said that he could see no prospect at present of a reduction in building society rates of interest, and he hoped that the movement would not be subjected to a 'pressurised clamour' on this issue at the first flutter of the economic barometer.

'The side effect of reducing rates too soon is quite drastic and, I suggest, completely misunderstood by some of our more captious critics,' he declared. 'A queue of potential borrowers is left unserved, and the provision of mortgage finance for home owners becomes a nightmare for builders, for applicants, for professional men, and for building societies—all this for a reduction in interest to existing borrowers which means a few shillings per week less tax. We do not keep rates up for profit, but we do try to keep them at the level which permits us to do our job of financing home-buying.'

At the resumed meeting following the luncheon, the proposed House Builders' Committee was formed.

Bedford Builders Combine

Land Acquisition Proposed

A MOVE to counter the activities of the big national development combines in their own county comes from a group of 25 Bedford building firms who are registering a company in which they have each taken shares, 'The Times' reports.

To be known as Associated Bedford Development, Ltd., the company will seek to acquire land for development which would otherwise be beyond the capacity of the individual medium-sized builder. All local authorities in the district have been asked for support and information about sites.

The new association, with an office in Bedford, will become the developers of any land acquired, while the member firms will decide among themselves which is to install services and which to build the houses. Local supply purchasing will benefit the builders' merchants, who are sometimes by-passed by the national combines.

The Week In Parliament

From Our Own Correspondent

Public Health Bill Amendment

LORD BRECON, Minister of State for Welsh Affairs, the spokesman in the Lords for the Ministry of Housing and Local Government, told peers on February 21 that he had had sent to him a good deal of interesting literature on baths and showers following a discussion in the House on the clause in the Public Health Bill dealing with the provision of bathrooms.

On the report stage of the Bill, Lord Brecon moved an amendment to re-phrase and improve the first sub-section of the Clause so that it reads: '(1) Where plans (a) for the erection of a house, or of a building part of which is intended to be occupied as a separate dwelling, or (b) of any works involving the conversion of a building into a house or into separate dwellings, or the conversion of part of a building into a separate dwelling, have been deposited with a local authority in pursuance of building by-laws or building regulations, the local authority may, subject to the provisions of this section, reject the plans if they do not show that the house, or as the case may be, each separate dwelling, will be provided with a bathroom containing either a fixed bath or a shower bath, and a suitable installation for the provision of hot and cold water to the bath or shower bath.'

Lord Brecon recalled that previously the Clause had merely provided that local authorities should have a discretionary power to reject the plans of a new house submitted to them under the building by-laws or regulations if those plans did not show that the house would be provided with a bathroom containing a fixed bath or a shower. In their earlier debate it was suggested that the Clause should apply to conversion as well as to new buildings and this had been met. Secondly, it was the general wish that there should be provision for hot and cold water and this point had also been met.

Peers had also earlier questioned whether the expression 'shower bath' was sufficient—could it perhaps cover something less than a full installation: would it be possible, for instance, to meet the requirements of the Clause by putting in a shower which was not connected to the water supply or a nozzle which sprayed the room indiscriminately? These points had been watched in the revised version of the sub-section and he thought the wording would achieve the right result.

Hot and Cold Water

He added—'The point about a hot and cold water supply is not met specifically and I do not think there is any real danger of the words "shower bath" being accepted as applying to anything less than a proper installation. The expression is already used in housing legislation without any difficulty having arisen, so far as I am aware, and the fact that the shower must be indicated on the plans means that it will have to be a proper installation.'

Lord Brecon confessed that the point which he had not been able to meet was one that local authorities should have the power to require owners to construct or provide bathrooms in existing houses. No one would deny for a moment, he said, that it was desirable that older properties should be improved in this way where it was possible to do so and where the age and condition of the premises warranted the expenditure.

But the practical problems were usually pretty formidable. Plumbing and drainage were required. In addition, the creation of a bathroom in a house which did not possess one already would involve either building an annexe to the house or using part or whole of another room.

The right course was to tackle the problem of bathrooms by persuasion, backed with grants towards the expenditure involved, and this was exactly what the Government was doing at the moment and many people were taking advantage of it.

LORD SHEPHERD thanked the Minister for this major improvement to the Bill. There were many houses converted into separate dwellings and flats and now that the Bill provided that separate bathrooms must be provided in these dwellings, it was a major improvement.

The amendment was agreed to.

To the Clause dealing with the advertisement of proposals to relax building regulations, LORD BRECON moved an amendment, which was accepted, to enable the Minister or the local authority to require an applicant for a relaxation to pay the cost of publishing in a local newspaper the specified notice.

Development of London's Airports

SUITABLY developed, London (Heathrow) Airport and London (Gatwick) Airport were considered adequate to meet the needs of the London area for transport airports up to the 1970s, said LORD MILLS, Paymaster-General, in the Lords on February 23. He said that it was not correct to say that lack of money had held up development.

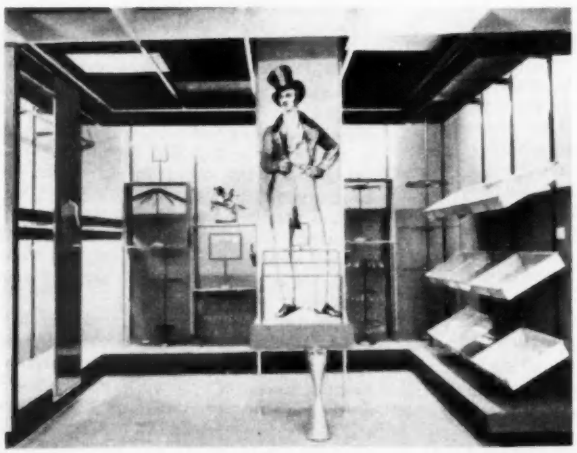
At Heathrow, the first part of the new long-haul passenger building would be completed towards the end of 1961 and the remainder by the spring of 1962. It would provide the most up-to-date services for passengers on long-haul routes. The Milbourne Committee, in their recommendations on the development of Heathrow, had proposed that aircraft stands in the central area should be increased from 50 to 100. Half of these would have been completed by the end of 1961. To achieve this virtually a continuous programme of construction had been going on since 1958 and it would continue until about 1966. Runway No. 5 was being lengthened to accommodate large jet aircraft. Improvements would be made to the interior of the short-haul passenger building.

After a detailed examination of the future requirements of freight and the best way of handling it, the Ministry of Aviation had decided to build the first section of a permanent building in the central area which would be available for BOAC when they moved into the new long-haul terminal.

The Milbourne Committee had recommended that piers should be incorporated in the design of the passenger buildings at Heathrow to enable passengers to go on foot between aircraft and the main buildings. It remained the intention to provide the buildings with piers, but because of the problems of handling large jets in the proximity of piers it was decided not to build them immediately but to study the performance of the large jets in greater detail. He made it clear that the decision had been made to provide the piers—it was a question of exactly what form they should take.

It was intended to develop the facilities at Gatwick as the traffic requirements of passengers and freight expanded. The need for another airport to supplement Heathrow and Gatwick did not seem likely to arise for a few years, but in the meantime Stanstead would be in reserve and could be put into use at comparatively short notice, should it be required.

On the question of the link between Heathrow and the centre of London, the Government had set in motion a big programme of road improvements and development. The improvements would



NEW SHOWROOMS: *Ideas for shop display can be seen in the Wilpower showrooms, which have recently been opened by John Wilkins & Co., Ltd., at 231-243 St. John-st., EC1. On the premises are a number of shops for different types of merchandise, created by well-known architects and designers. On the left is the Men's shop, designed by M. Thual of Paris, under the central direction of Mr. Ellis E. Somake*

Truscon

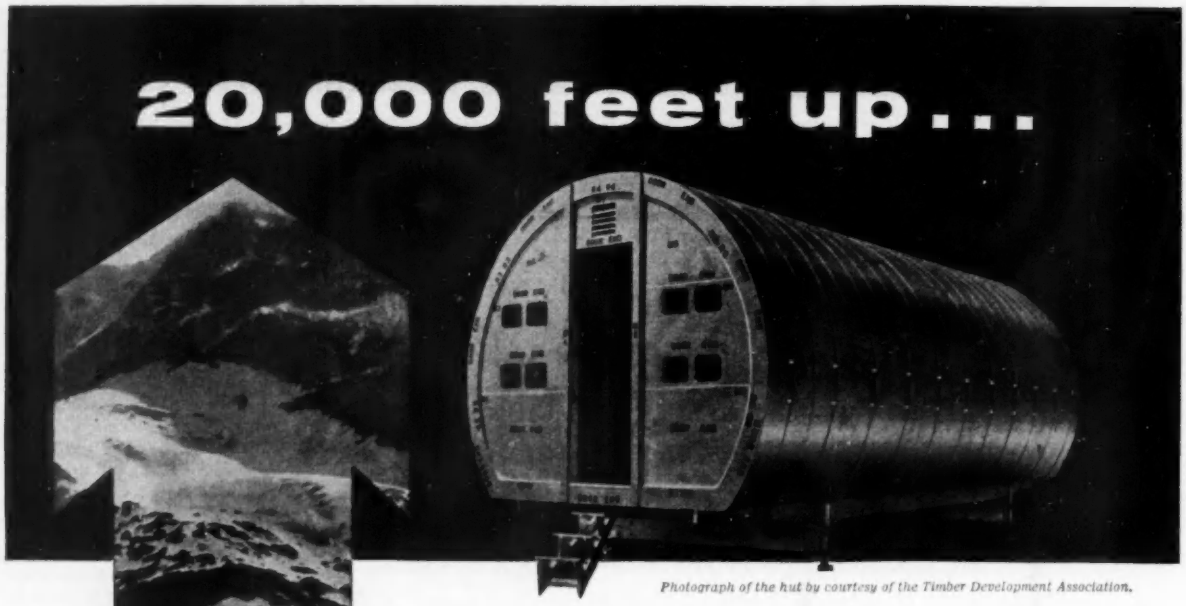
FOR PARKING GARAGES

* ***Write for a copy of Truscon Review Number 19***

Truscon Limited, Reinforced Concrete Designers & Contractors
35/41 Lower Marsh, London SE1 Waterloo 6922

Also at: Birmingham, Edgbaston 4391-2-3 · Bristol 21861 · Glasgow Central 0157-8
Liverpool, Central 5281-2 · Manchester, Trafford Park 2766 · York 24594

20,000 feet up...



Photograph of the hut by courtesy of the Timber Development Association.

but they slept warm thanks to Marleycel

The organisers of Sir Edmund Hillary's recent Himalayan expedition left nothing to chance.

A portable plywood hut was designed to house the members of the expedition at 20,000 feet. To insulate it against cold even as low as —30°C. they chose Marleycel Expanded Polystyrene, giving it an insulation value six times greater than that of a brick-built house.

Proof enough that not even intense cold can penetrate the featherlight, rot-proof Marleycel, the amazing insulator that is revolutionising building insulation.

*** Marleycel can be used for roof, wall and floor insulation * It achieves maximum results at minimum cost * Thermal Conductivity (K) 0.24 B.Th.U./in./Sq. ft./hr. °F. (Hot face @ 68°F, Cold face @ 32°F.) * Supplied in snow-white sheets 2ft. wide, various thicknesses and standard lengths of 4, 6, & 8 ft., or to order * Weight: 1 lb. per cubic foot * Self-extinguishing grade is Class I B.S. 476 spread of flame test.**

MARLEYcel

EXPANDED POLYSTYRENE INSULATION BOARD

POST THIS COUPON

Please send me further details of Marleycel Expanded Polystyrene Insulation Board.

Name .....

Company .....

Address .....

.....

** Marleycel—manufactured by Shell and developed by Marley for the building industry.*

MARLEY SEVENOAKS · KENT · Tel: Sevenoaks 55255
London Showrooms: 251 Tottenham Court Road, W.1.

cost about £21.5m. The Government were willing to examine detailed and fully worked out proposals for a monorail link. It would be an attraction to the Government if such a project was financed by private money and was not a burden on public funds.

Other Business

Land Acquisition for Trunk Roads

In explaining the system of advance payments in respect of land acquired for trunk roads, SIR EDMUND COMPTON, Comptroller and Auditor General, in a report on the Civil Appropriation Accounts, 1959-60, published on February 7, indicates that these arrangements were intended to be temporary, pending the introduction of legislation to shorten the acquisition procedure.

Surveys for New Motorway

LORD CHESHAM, Parliamentary Secretary, Ministry of Transport, stated in the House of Lords on February 8 that much of the A30 trunk road beyond Staines had been the subject of ribbon development and was not suitable for improvement on the present alignment. Preliminary surveys were therefore in progress now for the construction of a motorway to replace A30 for through traffic from Sunbury to a point west of Basingstoke.

National Theatre

THE CHANCELLOR OF THE EXCHEQUER is to inform the Commons of the Government's decision about the proposed national theatre on the South Bank 'as soon as he is in a position to do so.' This was the substance of replies by SIR EDWARD BOYLE, Financial Secretary to the Treasury, to Conservative and Labour members who questioned him about it on February 9.

It had been thought that the Chancellor would have been able to give definite news by now. He has seen an all-party deputation on the subject but the feeling at Westminster is that there is some hesitation by some members of the Government to authorise this type of project at a time when so many other demands are being made on Government funds. Nevertheless a decision one way or the other is expected before the Budget in April.

Architect for Airport

MR. JOHN RANKIN asked the Minister of Aviation on February 13, when he proposed to choose an architect to proceed with the planning of Abbotsinch Airport.

MR. GEOFFREY RIPPON, Parliamentary Secretary: 'The preparation of instructions for an architect is in hand and the Minister expects to be able to make an appointment shortly.'

Afforestation in National Parks

A voluntary agreement has been reached between the various interests concerned with afforestation in the national parks, and the details were revealed to MPs on February 14 by SIR KEITH JOSEPH, Parliamentary Secretary, Ministry of Housing and Local Government. The purpose of the scheme is to secure consultation of the park planning authorities on proposals for private afforestation of any land which has hitherto not been planted. The scheme recognises that park planning authorities should be given the opportunity of commenting upon all proposals for this type of afforestation and that the Timber Growers' Organisation and the Country Landowners' Association had undertaken to advise their members to proceed to such consultation.

Municipal Houses, Scotland

MR. MANUEL asked the Secretary of State for Scotland on February 14, what was his estimate of the number of municipal houses to be built this year.

MR. T. G. D. GALBRAITH, Under-Secretary: 'The Secretary of State does not expect the number to be any less than last year, when almost 18,000 houses were completed.'

Quarters for the Navy

The explanatory statement on the Navy Estimates, 1961-62, published on February 16, said that total works expenditure during the year would be about £25,750,000. About £3m. of this would be for new and improved living accommodation, including married quarters. An important task to be completed during the years was the £7.5m. underground oil fuel installation in Malta shared between Admiralty, the War Office, NATO and the Malta Government. Other projects begun or continued would include runway and workshop extensions, mainly in the Home Air Command, for the new generation of naval aircraft.

Building for the RAF

In the section of the Memorandum on the Air Estimates dealing with works and lands (published on February 20) MR. JULIAN AMERY, Secretary of State for Air, explains that the main operational projects in the year ahead were the ballistic missile early warning station, other radar centres for control and reporting, and the improvement of dispersal airfields for the 'V' bomber force.

The domestic building programme would help to raise the general standard of living in the Royal Air Force. New designs would make RAF houses more attractive and give them a better internal layout. £9m. was provided in 1961-62 for expenditure at home on permanent domestic accommodation. About half of this sum was to provide homes for families. Four thousand married quarters should be under construction next year. These, when completed, would bring the total built in the United Kingdom since 1945 to 25,000.

For major works services overseas, £10¼m. was provided. Nearly £4m. of this would be for domestic accommodation. In Aden, some 300 married quarters were now under construction and should be ready for occupation within the next few months. Work on the hospital and the new school is on the point of completion. Six new barrack blocks were ready and one more was nearly finished.

During 1960, the last 1,600 acres of land held under emergency powers were either derequisitioned or acquired by purchase or lease. In addition, the Air Ministry sold 8,000 acres of land at surplus airfields and othter sites.

Heliports in London

MR. SKEET asked the Minister of Aviation on February 20 to make available a report of the technical committee ordered by the Minister of Transport and Civil Aviation in July, 1959, or such part of it relating to the location of heliports in London, and if he would make a statement on the establishment of commercial heliports in London and other UK cities.

MR. GEOFFREY RIPPON, Parliamentary Secretary, wrote: 'The Committee came to the conclusion that three sites in central London, namely Nine Elms Goods Depot, Cannon Street Station and St. Katharine Dock, would be operationally possible for regular services with large helicopters. The Minister has asked the Committee to examine certain aspects in more detail and has authorised further technical studies. The local authorities in other cities have been invited to earmark sites for heliports, and we are always ready to advise those that have not yet done so.'

Overspending on Public Buildings

A supplementary estimate of £1,728,000 has been presented to Parliament as being required in the year ending March 31, 1961, to meet overspending for public buildings in the United Kingdom. The original estimate for the current financial year for spending on public buildings was £6,649,020 and this has been increased to £8,377,020. Out of the £1,728,000 increase, £860,000 is required towards the acquisition of the National Library site for the British Museum, £79,000 towards the purchase of additional land in Chancery-lane for the Public Record Office and £401,500 towards the acquisition of St. Stephen's Club as part of the development of the Bridge-street/Parliament-street site.

Another £140,000 is wanted for expenditure on new works, alterations, additions and purchases for public buildings overseas. Here the original estimate was £1,647,500.

Hospital Planning and Design

LORD BALNIEL asked the Minister of Health what subjects were covered in the series of building notes which were in the course of preparation by his department in order to give guidance on hospital planning and design.

MR. ENOCH POWELL wrote: 'The paration of a building programme, including assessment of need; the cost of hospital building; the planning of each of the departments of a hospital; and the relationship of departments in a district general hospital. Further subjects will be covered as need arises.'

Design of Farm Buildings

SIR KEITH JOSEPH, Parliamentary Secretary, Ministry of Housing and Local Government, announced on February 24 that the Minister of Housing was considering whether a useful purpose would be served by trying to produce, with the Minister of Agriculture and the Council of Industrial Design, a technical publication about the design of farm buildings.

Subsidies Under the New Housing Bill

Ministry's Circular to Local Authorities

THE MINISTRY OF HOUSING AND LOCAL GOVERNMENT has sent a circular to local authorities (No. 8/61) drawing the attention of councils to the new Housing Bill, published on February 16, and in particular to the provisions it contains in respect of housing subsidies. Changes are being proposed in the subsidy arrangements; and if Parliament approves the proposals the change will operate as from February 16. The new rates are briefly summarised in the appendix to this circular (reproduced in next column).

On date of operation, the circular continues, the precise proposal is that the new subsidies will become payable on dwellings for which the building tender or estimate is accepted by a formal resolution of the authority as from February 16, 1961. But where a tender or estimate, though formally accepted on or after that date has already been submitted to the Minister, the subsidy provisions in the Housing (Financial Provisions) Act, 1958, will still apply.

In the case of houses built under authorised arrangements by a housing association, the new subsidies will be attracted where the arrangements were made on or after February 16. But if the Minister is satisfied that the substantial effect of those arrangements had been agreed before that date, the subsidy provisions in the 1958 Act will apply.

Subsidy is to be payable at the appropriate rate (see the appendix) for any house provided by a local authority which is approved for the purpose of subsidy. This means that the limitation of subsidy to particular purposes will no longer apply. The Minister will, however, require to be satisfied before giving his approval that there is a genuine need for the authority to build for the purposes they propose; and he will expect that local authorities will continue to concentrate mainly on slum clearance, building for old people (for which the rate of subsidy is to become the same as that for slum clearance) and building for overspill.

The Council will be aware that the Minister has just laid a White Paper, Cmnd. 1290, before Parliament. His proposals are explained in more detail in that Paper.

The Council will appreciate that unless and until the Bill becomes law, the Minister cannot approve dwellings for subsidy purposes under its provisions. Authorities should, nevertheless, continue to submit tenders and estimates to him in the normal way and applications for loan sanction will be considered so that no delay need occur in an authority's house-building programme. Where the dwellings being provided qualify for subsidy under the Housing (Financial Provisions) Act, 1958, the Minister's approval will continue to be given as now under Section 1 of that Act. Where the dwellings come within the provisions of the Bill, authorities may assume that approval will be given if and when the relevant provisions become law unless they are notified to the contrary.

The proposed new rates of subsidy are as follows:—

A. Dwellings Provided by Local Authorities

(References are to the sections of the Housing (Financial Provisions) Act, 1958.)

(i) *Dwellings Provided for Special Purposes.*

Town Development (Section 3 (2) (c))	
Comprehensive Development similar to a New Town (Section 3 (2) (e))	£28
Urgent Needs of Industry (Section 3 2(d))	£24

(ii) *Other Dwellings Approved for Subsidy Purposes.*

There are to be two basic rates of subsidy. They are £24 and £8. Which rate is payable in the case of any particular authority will be determined by a resources test. For this purpose the housing expenditure of the authority, as shown in the Housing Revenue Account—normally for the year preceding the completion of the dwelling—will be compared with the income available to them for housing purposes. In making this comparison each authority will be assumed to have, in the place of the house-rents actually received and any contribution actually made from the rates, an income equal to twice the gross value of their dwellings for rating purposes. This potential income will be added to the actual income they receive by way of Exchequer subsidies and from other sources, and the total thus produced will be regarded as their income. Any authority whose income, measured in this way, is less than their actual expenditure (disregarding balances) will qualify for a basic subsidy of £24 a dwelling. The remainder, subject to a measure of marginal relief, will receive £8.

Authorities whose resources are particularly deficient, when viewed in terms of the yield of a penny rate, and whose general rate is above the national average, may qualify for supplementary subsidies increasing the basic subsidy to a maximum of £40 per dwelling. (Section 6 of the 1958 Act will be repealed.)

B. Housing Associations

Dwellings which are approved for the purpose of the subsidy provisions	£24

C. Flats in Blocks of Four or More Storeys

All subsidies described above, including the supplementary subsidy of up to £40 per dwelling, will be increased on a common scale where the dwelling is a flat in a block of four or more storeys. This additional scale is as follows:—

Flat in a block of four storeys	£8
" " " " " five "	£14
" " " " " six "	£26
For each additional storey above six storeys the amount per dwelling will be increased by	£1-15s.

D. Subsidies Remaining Unchanged

Expensive sites (Section 7)
Agricultural Dwellings (Section 5)
Subsidence and Special Materials (Section 8)
Private Agricultural Dwellings (Section 46)

All subsidies will normally be payable for 60 years following the completion of the dwelling, but there will be power to reduce payments by order after ten years. The intention here is explained in paragraph 38 of the White Paper.

There will also be power as at present from time to time by order to reduce or abolish subsidies on future building.

Good Housing Design Competition

Later Closing Date for Entries

MR. HENRY BROOKE, Minister of Housing and Local Government has, in response to requests, decided to allow more time for entries in this year's good housing design competition, and has changed the closing date for entries from February 28 to March 31.

The competition, announced last October, is being held by the Minister in collaboration with the Royal Institute of British Architects. It covers groups of at least ten new dwellings built on one site by either public authorities or private enterprise between December 31, 1955, and December 31, 1960.

In judging, emphasis will be on the interesting and attractive grouping of buildings, and accordingly it is not expected that either large housing estates or isolated terraces or blocks will be entered. Awards will be made by the Minister on the recommendations of panels of judges set up for each of four regions in England and Wales.

Copies of entry forms and of notes on the competition may be obtained from the Secretary, Awards for Good Design Competition, 1961, Ministry of Housing and Local Government, Whitehall, SW1. For entries in Wales and Monmouthshire, entry forms should be obtained from the Secretary, Awards for Good Design Competition, 1961, Welsh Office, Ministry of Housing and Local Government, Cathays Park, Cardiff.

Provision of Shops in the City

Firm Stand Taken with Developers

THERE HAS BEEN a decrease of 53 per cent in the number of shops in the City of London since 1939 and 18 per cent in the number of restaurants, it was stated by counsel for the Corporation of London at an inquiry, on February 21, into an appeal heard by a Ministry of Housing and Local Government inspector. Winmor Properties Ltd. appealed against a condition imposed by the corporation that provision must be made for the incorporation of shops in at least two-thirds of the frontage in a project for rebuilding Nos. 35, 37 and 39, Moorgate as offices.

Replacement Policy

MR. S. M. HAINES, LRIBA, architect for the developers, said the building proposed would be of seven storeys with provision for a car park. If shops were incorporated in the development they would be small and spoil the building both architecturally and economically. The building was intended as an office block.

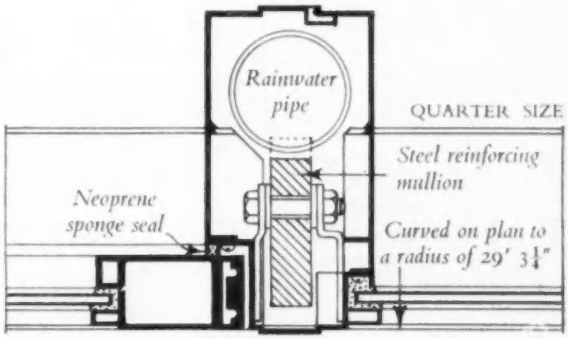
MR. W. J. GLOVER, for the corporation, said it was the policy of the Town Planning Committee that existing shops and restaurants should be replaced in new development. MR. H. A. MEALAND, planning officer to the corporation, said there had been a great tendency by developers to omit shops from their plans and the corporation were having to take a firm stand in the matter.

HOPE'S aluminium windows

NEW OFFICE BUILDING FOR THE BRITISH EMBASSY, WASHINGTON, D.C.
Architects: Eric Bedford, C.B., C.V.O., A.R.I.B.A., and W. S. Bryant, M.B.E., A.R.I.B.A., Ministry of Works Contractor: John McShain, Arlington, Virginia.

HOPE'S Aluminium Windows have been installed throughout this, the largest single building erected outside Britain by the Ministry of Works.

The windows were made partly at our British factory in Smethwick and partly by our associated American Company, Hope's Windows Inc., in Jamestown, N.Y., thus ensuring the lowest cost and best service for our customer.



Section through an extruded aluminium mullion and door stile in the circular Conference Hall seen above.

HOPE'S WINDOWS
The Name Guarantees

HENRY HOPE & SONS LTD
SMETHWICK, BIRMINGHAM
LONDON: 17 BERNERS ST., W.1

The £.s.d. of OSAL ★

—*Hardening and Oil Resisting for Industrial Floors*

It's not the cost per gallon but the cost per yard that counts

On this basis Tricosal, which hardens and provides increased oil resistance for a cubic yard of 1 : 2 : 4 concrete for only 14/-, is the most economical as well as the most efficient additive. It enables the concrete to be trowelled to a finish without an additional topping. It hardens integrally and, being a liquid, mixes with the gauging fluid and is evenly distributed throughout the mix.

INTEGRAL CEMENT
TRICOSAL
HARDENER-PROOFER

Tricosal is now available in non-returnable containers.

For 30 years or more Tricosal has been specified by leading Architects not only for hardening and oil resistance but for waterproofing cement and concrete and increasing their resistance to acids. Send for Information Leaflet No. 1.

★ *OSAL is the generic name for the products of A. A. Byrd & Co. Ltd.—" Florosal " for Surface Hardening and protection of Concrete, Stone and Cement—" Neocosal " for Surface Waterproofing of Brick, Concrete and Stone, and " Tricosal ". Literature on each individual product is available from*

A. A. BYRD & CO. LTD. (Dept B7) 210 TERMINAL HOUSE, GROSVENOR GARDENS, LONDON, S.W.1.

Phone : SLOane 5236. Grams : Byrdicom, Wesphone, London. Works : Basingstoke, Hants.

Cost Research

Work and Trends of RICS Panel

The February issue of the 'Chartered Surveyor' contains a report of the work on cost research by the RICS Panel, and indicates some trends. Reprinted below are some extracts from the report which is commented on editorially on page 389 this week.

Background to Cost Research

CHARTERED SURVEYORS concerned with the management and development of land and the buildings upon it, are necessarily concerned with matters of cost. Different aspects of cost require to be examined by surveyors practising in the various sections of the profession, but a detailed knowledge of cost, whether of land or buildings, is of fundamental interest to all.

Since 1945 there has been an extension of the use of cost information in most sections of the national economy. Costing, which is concerned solely with the correct accounting for expenditure, is no longer considered adequate. Costing plays a positive part in forming decisions, and is the medium through which the economics of any enterprise are assessed or controlled. This is achieved by the evaluation not only of total costs but also of the cost of each step in the planning and execution of a project.

This development has been especially marked in the field of building costs. Rising prices, restriction of the use of capital and high interest rates have caused building owners to demand that their consultants should accept cost as an element in design and that they should provide a balanced cost in all parts of the building, as well as an accurately forecast overall cost.

Chartered surveyors have long been accustomed to provide cost information to their clients. The increased awareness of costs in the building industry, however, revealed the need for surveyors to improve their knowledge and techniques, and for the profession, as a whole, to conduct expert research into general problems beyond the resources of individual practitioners.

In September, 1955, the Quantity Surveyors Committee appointed a small steering committee to study the question of cost investigation. As a result of its report, the Quantity Surveyors Committee recommended that the Council should appoint a Panel to carry out research into the broad problems of building costs, and to stimulate the interest of members in such matters. They felt it was vital for the Institution to give a lead in cost research, to act as the focal point in the mind of the community for building cost information, which, in turn, would extend the field of influence of the chartered surveyor into the broader aspects of building economics.

Organisation of the Panel

The panel was formed in May, 1956, under the chairmanship of Mr. Cyril Sweett, and now consists of 16 members. Mr. Sweett retired from the chair in June, 1960, and has been succeeded by Mr. E. R. Parrinder.

The report then goes on to describe the investigation into the question, posed by the Minister of Housing and Local Government, why flats cost more to build than houses and to see what suggestions could be made as to how the cost of flats might be reduced. The Panel's report to the Minister, submitted on June 2, 1958, was subsequently issued by the Institution, and more than 1,200 copies were distributed.

Recent Work of the Panel

Having completed its work on the problem posed by the Minister, the Panel turned to the second stage of its programme, of which the main point has been the spread of interest in cost planning. In June, 1959, the Panel formed two Working Parties from its own membership. These reflect the two lines along which research has proceeded; research into design-cost relationships and research into techniques.

The first Working Party, on Design-Cost Research, was given the task of stimulating cost research in the Quantity Surveyors Sections of the Branches. The Panel had issued in April, 1959, an invitation to all Branches to participate in cost research. Specific aspects of design and cost were allocated to the Branches. The Lancashire, Cheshire and Isle of Man Branch had already completed a study of roof costs, and their approach was taken as the model for other Branches. A meeting of Branch representatives was held at the Institution in June, 1960. At present, 16 Branches, including the Junior Organisation Quantity Surveyors Committee, are participating in this programme. The important point to this research is not so much the results produced, although they are valuable, but the insight into the problems of costing gained by the individuals undertaking research.

The Design-Cost Research Working Party is also continuing the Panel's studies into building costs. Current work includes a study of reports on housing densities and costs, the preparation of indices of building costs by trades for steel-framed and concrete-framed office blocks, liaison with the Ministry of Health in connection with their research into their building programme, and advice to different organisations engaged in building cost research.

The second Working Party on quantity surveying techniques is studying the systems and operation for which the bill of quantities may be used. Uses by clients, architects, quantity surveyors and builders are being considered, and to collect evidence a questionnaire has been circulated. An historical survey of the growth of the bill has been completed, and present and potential uses of the bill are now being examined.

A third Working Party was established in March, 1960, to study costs of agricultural buildings. Work is still at a very early stage, but it is hoped eventually to make a useful contribution in consultation with the Agriculture and Forestry Committee of the Council.

Post-Qualification Courses in Cost Research and Cost Planning

The courses in cost planning sponsored by the Panel deserve special mention. To spread knowledge of cost planning techniques, the Panel has sponsored three post-qualification courses in cost research and cost planning, designed for principals and senior assistants. The LCC Brixton School of Building is responsible for the administrative organisation of the courses which are held in the College Suite of the Trades Union Congress Memorial Building. Courses have so far been held in November, 1959, and May and November, 1960. This last was planned for members from the provinces in the hope that they would themselves organise regional courses.

Discussions have also taken place with the College of Estate Management on a proposal that a correspondence course in cost planning should be provided by the College for members at the post-qualification stage.

Liaison with other Bodies

From its earliest days, the Panel has endeavoured to establish a comprehensive network of liaison with different bodies interested in building costs. Of particular interest is the liaison established by the Panel with members overseas. There is great interest in cost planning among members in the Union of South Africa, and a liaison member for cost research (Mr. O. C. Venn (Fellow)) has been appointed. Members in Australia have also shown their interest, and here again a liaison officer for cost research, Mr. A. P. Carpenter, has been appointed.

Formal liaison with the Royal Institute of British Architects was established in the spring of 1959 with the formation of a Cost Research Liaison Committee. The terms of reference of the Liaison Committee are:—

(i) to stimulate research into the cost of building including joint research by architects and quantity surveyors;

(ii) to consider and advise upon the co-ordination of the activities of each body in the field of building economics; and

(iii) to facilitate the flow of information and ideas in this field.

This Committee has met somewhat infrequently, especially since the disbanding of the RIBA Cost Research Committee and the merging of its responsibilities with the RIBA Management Committee.

In addition, liaison has been established with many other professional institutions and trade and research associations, as well as the contacts which are maintained with Government depart-

ments and both the national and the technical Press.

The Panel has also established liaison with bodies in the United States, Canada, Belgium, France, Denmark and Israel, and with the Economic Commission for Europe of the United Nations Organisation.

Future Work

The ultimate aim of the Panel is to increase the efficiency of the chartered surveyor concerned with building costs. It should ensure that the most up-to-date methods of producing speedy and accurate information on building costs are known to, and used by, all members. Although it is too early to advise the Council precisely on the ultimate form of the Panel's work, the next stage should clearly concern action under item (i) of the Panel's terms of reference, namely, the consideration of the creation of a focal point for the collection of cost information. Much preliminary work has been completed, particularly on the financial feasibility of creating a cost information service, and on the form which it should take. The Panel's work should not overlap the information services now being considered by the Internal Services Committee of the Council. There are, however, special problems in the collection and collation of building cost information which set this matter apart from the supply of other professional data.

Present Constitution of the Cost Research Panel

The members of the Panel are:—

Messrs E. R. Parrinder, Chairman; Cyril Sweett, Immediate Past Chairman; Frank Hyams; Peter Johnson; James Nisbet; D. W. Nunn; W. J. Reiners; C. M. Silk; C. A. Wales; C. H. Walker; L. McLeod Watson; Research Officer, F. M. J. Lee BSc(Econ.); Officers of the Quantity Surveyors Committee are *ex officio* members of the Panel.

There is, in addition, a liaison member from the RIBA, Mr. R. Baden Hellard.

Hotel Building Programme, Eire

Irish-American Company Plans Three

PRELIMINARY DESIGNS for three hotels to be built in Dublin, Cork and Limerick for Irish and Intercontinental Hotels, Ltd., at an estimated cost of £2½ million, have been prepared by Mr. William B. Tabler, the American hotel architect.

Work on the Dublin hotel is to start within the next three months and on the Cork and Limerick hotels later in the summer. The three hotels are scheduled for completion early in 1963.

The Dublin hotel is to be built on a site which was part of Dublin University Botanical Gardens at Ballsbridge. It will be an eight-storey, 320-room structure. Facilities will include a main diningroom, grill and speciality restaurant, a hall to seat 750 for a meal or 1,000 for a conference, an outdoor swimming pool and roof lounge. All bedrooms will have private baths. Public rooms will be air conditioned. There will be a car park for 250 cars.

Limerick and Cork Proposals

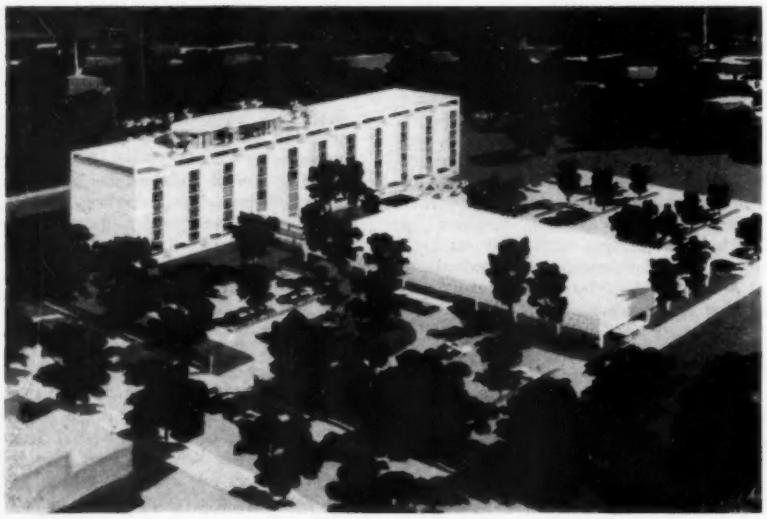
The Limerick and Cork Hotels will each have 96 bedrooms. All public and service facilities will be concentrated in a central building which will contain a restaurant, bar and lounge and ancillary facilities. The guestrooms will be in twin two-storey buildings. Each hotel will have an outdoor swimming pool. The Limerick hotel will be directly across the Shannon from the city centre, on the main road to Shannon Airport. The Cork hotel will be on Muskerry Island, near the city centre.

Half the cost of the hotels is to be met by a loan guaranteed by the Eire Government. There will also be a grant of about £154,000 from Bord Failte, the Irish tourism promotion board. Mr. T. J. O'Driscoll, Director General of Bord Failte, estimates that the hotels should be the means of bringing an additional £2m. a year of tourist revenue to Eire and give employment to some 600 people. In the construction Irish building materials are to be given preference.

The hotels will be operated by Intercontinental Hotels Corporation, a subsidiary of Pan American World Airways, under a management lease agreement. The Corporation is said to be the world's largest operator of international hotels. It manages fifteen hotels in eleven countries. Additional hotels are under construction or planned for Melbourne, Beirut, Geneva, Frankfurt, Vienna and Karachi.

Irish and Intercontinental Hotels Limited was formed last July by Aer Rianta (parent company of Aer Lingus—Irish International Airlines), the Gresham Hotel Company Ltd., Dublin, and Intercontinental Hotels Corporation together with other financial interests. Shareholders include the Aga Khan; Guinness and Mahon, merchant bankers; Baron Edmund de Rothschild and Countess Bismark. Directors of the company are Mr. J. Gorman (chairman), assistant general manager of Aer Lingus-Irish International Airlines; Mr. H. J. Daly, a director of the Gresham Hotel Co. Ltd., and Mr. R. E. Smith, assistant vice-president of Pan American Airways.

Perspective of proposed hotel, Dublin. W. B. Taylor, architect



Civil Engineering Wages

Increase of 6d. an Hour Agreed

AN INCREASE of 6d. per hour in the basic rate of craftsmen and labourers was agreed at a meeting of the Civil Engineering Construction Conciliation Board held in February 22. The increase will come into effect on October 2 next. The unions had claimed an increase of 8d.

MR. A. J. HILL, chairman of the Federation of Civil Engineering Contractors, said: 'The employers have confidence in the future of the civil engineering industry but these increased payments must be countered by management securing increased productivity, and to this end great reliance is placed on the continued co-operation of the unions.'

The Board agreed that last year's hours settlement, which reduced normal working hours to 40 in the winter (average 42¾ throughout the year) is working well. Following are details of the new and old hours and rates:

Working Hours.—Last year's hours settlement reduced normal working hours to 40 per week in November, December, January and February, but continued at 44 hours per week in the remaining eight months of the year. Average normal working hours per week 42¾ over the year as a whole.

Basic Wage Rate.—The increase is 6d. per hour. At present navvies' or labourers' basic wage rate is 4s. 6d. per hour in London and 4s. 4½d. per hour elsewhere. The craftsmen's basic wage rate is at present 5s. 1½d. per hour in London and Liverpool and 5s. per hour elsewhere.

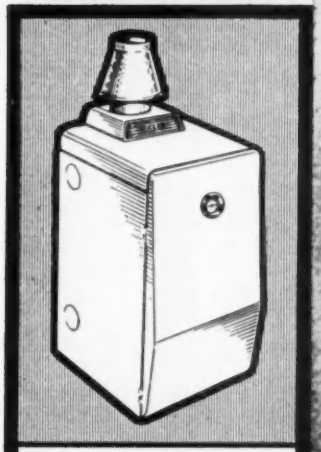
Bath after bath after bath...

and central heating too!

"Constant hot water" is no idle phrase with a Valor. *Because a Valor oil-fired boiler heats—and reheats—water quicker than any other.* A special system of copper rod heat-exchangers in the boiler captures maximum heat rising from the burner and gives super-fast conduction direct to the water.

Valor supplies hot water for central heating, too. And Valor, besides being the cheapest to run, is just about the cheapest to install.

- ★ **Unobtrusive—easy to install**
- ★ **Highest recovery rate of any oil-fired boiler**
- ★ **Extremely economical running—thermostat controls temperature**
- ★ **Anti-flooding safety device**
- ★ **White stove-enamelled casing complete with vitreous-enamelled draught-diverter**
- ★ **Guaranteed for 12 months**



MODEL SA 45
has an output of 45,000 B.T.U's constant loading suitable for up to 9 radiators (220 sq. ft. surface) and 30 gallons of hot water.
MODEL SA 35
has an output of 30,000 B.T.U's constant loading suitable for up to 6 radiators (150 sq. ft. surface) and 30 gallons of hot water.
MODEL SA 25
has an output of 15,000 B.T.U's constant loading suitable for 2 to 3 radiators (50 sq. ft. surface) and 30 gallons of hot water.

Valor

OIL-FIRED BOILERS AND RADIATORS

VALOR GAS BOILERS TOO!

For further details please contact:
THE VALOR COMPANY LTD.
Bromford, Erdington, Birmingham 24
Tel: Erdington 6151

ments and both the national and the technical Press.

The Panel has also established liaison with bodies in the United States, Canada, Belgium, France, Denmark and Israel, and with the Economic Commission for Europe of the United Nations Organisation.

Future Work

The ultimate aim of the Panel is to increase the efficiency of the chartered surveyor concerned with building costs. It should ensure that the most up-to-date methods of producing speedy and accurate information on building costs are known to, and used by, all members. Although it is too early to advise the Council precisely on the ultimate form of the Panel's work, the next stage should clearly concern action under item (i) of the Panel's terms of reference, namely, the consideration of the creation of a focal point for the collection of cost information. Much preliminary work has been completed, particularly on the financial feasibility of creating a cost information service, and on the form which it should take. The Panel's work should not overlap the information services now being considered by the Internal Services Committee of the Council. There are, however, special problems in the collection and collation of building cost information which set this matter apart from the supply of other professional data.

Present Constitution of the Cost Research Panel

The members of the Panel are:—

Messrs E. R. Parrinder, Chairman; Cyril Sweett, Immediate Past Chairman; Frank Hyams; Peter Johnson; James Nisbet; D. W. Nunn; W. J. Reiners; C. M. Silk; C. A. Wales; C. H. Walker; L. McLeod Watson; Research Officer, F. M. J. Lee BSc(Econ.); Officers of the Quantity Surveyors Committee are *ex officio* members of the Panel.

There is, in addition, a liaison member from the RIBA, Mr. R. Baden Hellard.

Hotel Building Programme, Eire

Irish-American Company Plans Three

PRELIMINARY DESIGNS for three hotels to be built in Dublin, Cork and Limerick for Irish and Intercontinental Hotels, Ltd., at an estimated cost of £2½ million, have been prepared by Mr. William B. Tabler, the American hotel architect.

Work on the Dublin hotel is to start within the next three months and on the Cork and Limerick hotels later in the summer. The three hotels are scheduled for completion early in 1963.

The Dublin hotel is to be built on a site which was part of Dublin University Botanical Gardens at Ballsbridge. It will be an eight-storey, 320-room structure. Facilities will include a main diningroom, grill and speciality restaurant, a hall to seat 750 for a meal or 1,000 for a conference, an outdoor swimming pool and roof lounge. All bedrooms will have private baths. Public rooms will be air conditioned. There will be a car park for 250 cars.

Limerick and Cork Proposals

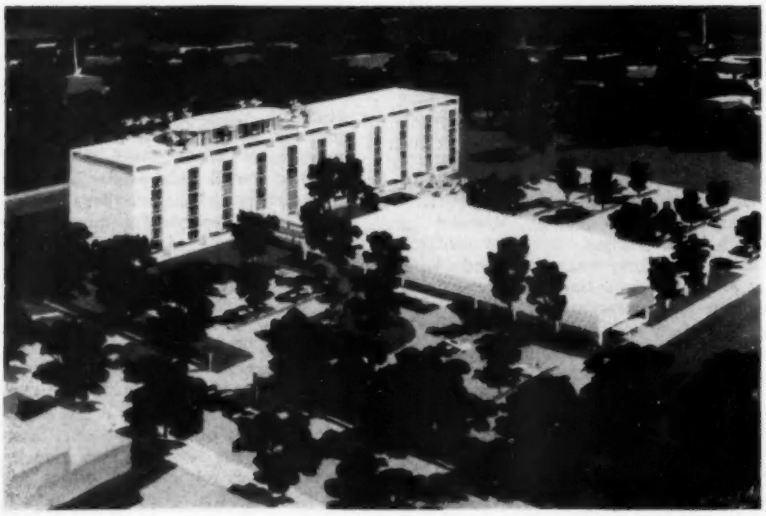
The Limerick and Cork Hotels will each have 96 bedrooms. All public and service facilities will be concentrated in a central building which will contain a restaurant, bar and lounge and ancillary facilities. The guestrooms will be in twin two-storey buildings. Each hotel will have an outdoor swimming pool. The Limerick hotel will be directly across the Shannon from the city centre, on the main road to Shannon Airport. The Cork hotel will be on Muskerry Island, near the city centre.

Half the cost of the hotels is to be met by a loan guaranteed by the Eire Government. There will also be a grant of about £154,000 from Bord Failte, the Irish tourism promotion board. Mr. T. J. O'Driscoll, Director General of Bord Failte, estimates that the hotels should be the means of bringing an additional £2m. a year of tourist revenue to Eire and give employment to some 600 people. In the construction Irish building materials are to be given preference.

The hotels will be operated by Intercontinental Hotels Corporation, a subsidiary of Pan American World Airways, under a management lease agreement. The Corporation is said to be the world's largest operator of international hotels. It manages fifteen hotels in eleven countries. Additional hotels are under construction or planned for Melbourne, Beirut, Geneva, Frankfurt, Vienna and Karachi.

Irish and Intercontinental Hotels Limited was formed last July by Aer Rianta (parent company of Aer Lingus—Irish International Airlines), the Gresham Hotel Company Ltd., Dublin, and Intercontinental Hotels Corporation together with other financial interests. Shareholders include the Aga Khan; Guinness and Mahon, merchant bankers; Baron Edmund de Rothschild and Countess Bismark. Directors of the company are Mr. J. Gorman (chairman), assistant general manager of Aer Lingus-Irish International Airlines; Mr. H. J. Daly, a director of the Gresham Hotel Co. Ltd., and Mr. R. E. Smith, assistant vice-president of Pan American Airways.

Perspective of proposed hotel, Dublin. W. B. Taylor, architect



Civil Engineering Wages

Increase of 6d. an Hour Agreed

AN INCREASE of 6d. per hour in the basic rate of craftsmen and labourers was agreed at a meeting of the Civil Engineering Construction Conciliation Board held in February 22. The increase will come into effect on October 2 next. The unions had claimed an increase of 8d.

MR. A. J. HILL, chairman of the Federation of Civil Engineering Contractors, said: 'The employers have confidence in the future of the civil engineering industry but these increased payments must be countered by management securing increased productivity, and to this end great reliance is placed on the continued co-operation of the unions.'

The Board agreed that last year's hours settlement, which reduced normal working hours to 40 in the winter (average 42¾ throughout the year) is working well. Following are details of the new and old hours and rates:

Working Hours.—Last year's hours settlement reduced normal working hours to 40 per week in November, December, January and February, but continued at 44 hours per week in the remaining eight months of the year. Average normal working hours per week 42¾ over the year as a whole.

Basic Wage Rate.—The increase is 6d. per hour. At present navvies' or labourers' basic wage rate is 4s. 6d. per hour in London and 4s. 4½d. per hour elsewhere. The craftsmen's basic wage rate is at present 5s. 1½d. per hour in London and Liverpool and 5s. per hour elsewhere.

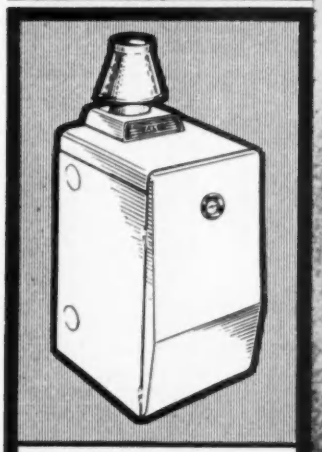
Bath after bath after bath...

and central heating too!

"Constant hot water" is no idle phrase with a Valor. *Because a Valor oil-fired boiler heats—and reheats—water quicker than any other.* A special system of copper rod heat-exchangers in the boiler captures maximum heat rising from the burner and gives super-fast conduction direct to the water.

Valor supplies hot water for central heating, too. And Valor, besides being the cheapest to run, is just about the cheapest to install.

- ★ **Unobtrusive — easy to install**
- ★ **Highest recovery rate of any oil-fired boiler**
- ★ **Extremely economical running — thermostat controls temperature**
- ★ **Anti-flooding safety device**
- ★ **White stove-enamelled casing complete with vitreous-enamelled draught-diverter**
- ★ **Guaranteed for 12 months**



MODEL SA 45
has an output of 45,000 B.T.U's constant loading suitable for up to 9 radiators (220 sq. ft. surface) and 30 gallons of hot water.
MODEL SA 35
has an output of 30,000 B.T.U's constant loading suitable for up to 6 radiators (150 sq. ft. surface) and 30 gallons of hot water.
MODEL SA 25
has an output of 15,000 B.T.U's constant loading suitable for 2 to 3 radiators (50 sq. ft. surface) and 30 gallons of hot water.

Valor

OIL-FIRED BOILERS AND RADIATORS

VALOR GAS BOILERS TOO!

For further details please contact:
THE VALOR COMPANY LTD.
Bromford, Erdington, Birmingham 24
Tel: Erdington 6151

THE CLAYTON **P.A.Y.E. TAX SLIDE**

CUTS THE COST* OF PAYE DAY!

P.A.Y.E. and Graduated Insurance deductions read off *at-a-glance* for weekly-paid employees! For employees on fluctuating pay it is indispensable—for 3 weeks in every 4 it reduces the work of P.A.Y.E. by 75%. For the fourth week you use the normal P.A.Y.E. procedure.

*** It is estimated that the normal time employed in P.A.Y.E. work is 2 minutes per week per employee. The Clayton P.A.Y.E. Tax Slide reduces this to 30 seconds for 3 weeks out of 4 —an overall saving of more than 50%!**

HOW IT WORKS

Slide CODE No. up to ARROW, then read off TAX & GRADUATED INSURANCE against PAY. Full instructions on back of Slide.

SO SIMPLE...

SO QUICK....

SO EASY!....

30/-

POST FREE

This includes free replacement of centre slider if '61 Budget alters P.A.Y.E.

FREE TRIAL OFFER

If you like, we will send you a CLAYTON P.A.Y.E. Tax Slide on approval for 14 days.

Send for your CLAYTON P.A.Y.E. Tax Slide today:— SKIRDEN PRODUCTS LTD., 25, BUCKINGHAM GATE, LONDON, S.W.1.

Work Study for the Medium-sized Builder

The Case for a Much Simplified Course in Method and Production Studies

BY L. V. MERLIN

The two-fold purpose of this article is first an attempt to interest the medium-sized builder by a simple and brief exposition of work study, and second to emphasise the need for its simplification and its universal application to building.

MUCH ATTENTION has been paid to the use of work study techniques in the building trade but I wonder how much of it is used outside the largest organisations. There are monthly publications devoted to the subject and innumerable text-books, but these all concern the industrial engineer. Presumably, therefore, any go-ahead builder interested in the subject will seek in vain for a magazine or text-book devoted entirely to the industry. If he does peruse available literature he will be lost in a sea of confusing statements and may feel that the way to efficiency is paved with literary jargon.

He will read that wage incentive schemes are good or that they are bad; that rating is feasible or that it is just nonsense. He will read (if he proceeds that far) about the queueing theory; ratio delay study; memo-motion; predetermined motion time standards; synthetics; cybernetics; and a host of other redoubtable techniques but little or nothing connected with building. In fact the situation has got so far out of hand that the British Standards Institution have deemed it necessary to produce a 'Glossary of Terms in Work Study' to ensure some degree of uniformity. The British Productivity Council have done valuable work to spread the gospel and have produced some films dealing with work study in building, while appreciation courses of varying usefulness are offered for an appropriate fee.

Courses which include work study have also been arranged in different regions of the National Federation of Building Trades Employers and other interested bodies. It is to be regretted that many of these use case studies to prove their point and some unduly depress the conditions obtaining 'before' to prove the advantages gained 'after' so that the practical builder is left with the impression, rightly or wrongly, that anyone could have seen what was wrong. What is badly needed is a case study of a site that is obviously well run to show what further improvements would be possible with work study.

Time Study

The expense of a work study department may not be justified in the smaller concern but every firm might afford to nominate one person from its staff to combine the duties of work study officer. The basic principles require to be set out in a simple manner, uncomplicated by specious jargon, and with the removal of all techniques that need not apply to the building industry, which, so far as work study is concerned, should learn to walk before it attempts to run.

Work study consists of two distinct parts: method study and time study. Time study is popularly regarded as a means of finding out how long a worker takes to do a job by timing him with a stop-watch and then halving the time. It is an unpalatable truth that there is no point in chopping a few minutes here and there when so much more time can be, and is, lost through defects in management. With few exceptions, most men will do a fair day's work if they know they will not be subject to the irritating and frustrating hold-ups that beset most sites. A stop-watch would therefore be well employed to find out how much time is lost per day by avoidable hold-ups; to find out why men cannot work; to assess the efficiency of different items of plant; or to compare different methods. Until the efficiency of the building industry is vastly improved, time should not be wasted on the worker while he has something to do.

Rating and Fatigue

Rating is an attempt to determine the level of skill and effort at which the operator is working and is a purely subjective judgment quite beyond the majority of 'do it yourself' work study men. The difference between the rating figures of any but the most qualified practitioners often exceeds the difference between operators doing the same work.

The most widely used method is that based on the 'point,' 'productive minute' or 'standard minute' as the unit of labour accomplishment, with 60 points per hour as the level of performance expected of the 'average' operator. Other systems use 80 or 133 points per hour. Thus, if an operator is rated at, say, 65, it is inferred that he is a little better than average.

The next point to be considered is relaxation, which is an allowance of time made for the fatigue caused in doing the job. So far as rating and fatigue allowances are concerned all that is necessary when the study is finished is to decide if the operator or gang were good, bad or indifferent. The usefulness of the study can then be interpreted in the light of this assessment. In taking a time study machine time is separated from manual time and ineffective or idle time from productive time.

One important technique is the breaking down of the complete operation into a number of smaller operations or break points, called elements. With a 12S concrete mixer, for example, these elements would be: (i) fill skip; (ii) raise skip; (iii) lower skip; (iv) mix; and (v) discharge mix.

For maximum economy element (i) must be done in the time taken for elements (iv) and (v). The advantage of this method is that in comparing two or more machines (or operators) it can be seen precisely where the advantage lies. It is, in effect, putting the operation under a mircroscope.

Method Study

Method study, quite briefly, is finding better ways of doing things and since the operator is only as good as his employer plans him to be it is aimed almost entirely at management. There appear to be at least three ways of doing a specific job: the method the estimator has in mind; the method the agent or foreman has in mind; and the method the operator actually uses when doing the job. Method study is therefore designed to highlight unnecessary activities and indicate where improvements are possible. A questioning technique is used which critically examines the whole procedure under five headings which inquire into the purpose of the operation; the place where it is carried out; and the means by which it is carried out. The questions 'What is achieved?' 'Is it really necessary?' and 'Why?' challenge the very existence of the activity. Thus one of the most important features of method study lies in the attitude of mind it generates, taking nothing whatever for granted and always asking 'Why?'

The most immediate gain lies in taking a production study, and this can be done with an ordinary wrist-watch. This covers the duration of the operation and may take a day or even longer. Ineffective or idle time is separately recorded, together with the reason. If this time is abstracted and analysed at the end of the study it will indicate where method study can be profitably used.

Production Studies and Incentives

Someone once said that the application of incentive schemes was often a carrot to compensate the donkey for the fact that we were expecting him to walk on three legs. When management has no accurate yardstick of what the level of production should be then an incentive scheme is of limited value. The installation will require the services of a first-class study man, but it is questionable whether managements are ready to tackle such an operation until better efficiency has been established at the higher levels.

It would appear that in the application of work study to the building industry method study will initially play the greater part. What is required is a simplified course in method study confining the time study instruction to the taking of production studies. These courses should be kept as short and as simple as possible and they should be directed entirely at the smaller builder.

There must be a vast untapped market here for work study which has not been catered for by the more ambitious and costly courses. The latter have probably frightened away the smaller man.

Prospects in the Timber Market

An Assessment of the Likely Trends

IN A PAPER on 'The Timber Industry,' submitted to the Royal Society of Arts on February 8, MR. RODNEY PERRY, chairman of the Timber Development Association, gave the following assessment of the likely trends in some of the more important timber markets:

HOUSING AND BUILDING GENERALLY.—The trend towards a smaller consumption of timber per unit of dwelling is likely to continue mainly as a result of the changing pattern of dwellings and the higher proportion of flatted dwellings in relation to the total to be provided. This, however, may be offset by an increase in the use of timber in the form of claddings, curtain walling and possibly also framing for small houses. In the large programme of multi-storey buildings, hospitals and schools which lies ahead there is ample scope for the development of the use of timber for a variety of components on a considerably larger scale than in the past. The extent to which this materialises will depend on the one hand on intensified research and development and on the other the removal of some of the more hampering by-laws in force at present.

PACKAGING.—A further decline of the small case and container industry is likely unless new techniques and designs are introduced. The larger sections of the industry engaged on big crates and packing cases will continue to depend on the state of the export market generally. The trends for the use of more plywood and other manufactured wood boards is likely to continue.

FURNITURE.—The overall timber requirements are not likely to be greatly changed, but the balance towards solid hardwoods and board products and veneers may shift still further in favour of the latter. The European Free Trade Association plans will materially affect the competitive ability of the industry against foreign competition and will require a more strenuous effort to improve designs.

JOINERY.—The joinery industry should continue to increase its sales still further with the boom in building. The prospect of an increase in imported joinery from the Scandinavian countries with the advent of the European Free Trade Association will give new impetus to the need for increased efficiency in many of the plants of the industry. The industry has great opportunities in developing new markets for curtain walling and built-in fitments.

TIMBER ENGINEERING.—On the showing of the past two or three years the timber engineering industry is likely to advance rapidly to a more prominent position among the wood-working industries.

MINING.—Research will be required into new techniques and designs for the timbering of mines if further decline through competition (mainly by steel) is to be avoided.

By and large the development and, indeed, the ultimate survival of a viable timber trade will depend on (*a*) the extent to which technological developments and improvements of timber and its products will keep pace with rapidly changing requirements in the consumer industries, and (*b*) the extent of rationalisation and mechanisation of the processing of the materials and its products to enable a competitive level of prices to be kept.

Today, by the standards of the more advanced sections of industry, investment by the timber trade and industries in research and development is extremely low. The rate of capital investment in buildings, plant and equipment also falls very short of that of the industries concerned with the more advanced competitive materials.

Sound Absorbing Materials

Results of Extensive Investigation Published

SOUND ABSORBING MATERIALS are being used increasingly for the control of the acoustical properties of concert halls and auditoria as well as noise reduction in offices, restaurants and factories. Measurements of the sound absorption coefficients of suitable materials have been carried out for a number of years at the National Physical Laboratory. They have included most of the proprietary materials used in this country as well as forms of special treatment and mounting.

The results of these investigations are now made available for the benefit of users, manufacturers, architects and others concerned. They have been brought together in a booklet entitled 'Sound Absorbing Materials,' by E. J. Evans and E. N. Bazley, published on December 30 and available, price 3s., from HM Stationery Office.

The main section of the booklet consists of tables of the absorption coefficients of over three hundred materials measured at the laboratory; both the materials and the method of mounting employed are described. The materials are classified broadly according to their physical characteristics, those of the same acoustical type being grouped together. The tables are accompanied by a discussion of the results. Recent developments in the design of sound absorbent materials are described as well as the various types and the physical processes involved.

Housing in the Isle of Man

Call for More Old People's Houses and Flats

LOCAL AUTHORITIES in the Isle of Man have received a letter from the Local Government Board calling attention to what they consider the 'important and pressing subject' of the care of elderly people and their housing accommodation. The Board say they are primarily concerned with the provision of suitable accommodation for those elderly people who are not chronic cases requiring institutional treatment.

Flatlets in Groups

They ask for the approximate number of elderly people in each district who need housing accommodation and the suggestion under consideration by the Board is that flatlets be erected in communal groups, say of six to twelve, on various sites throughout the Island, preferably on the existing housing estates, where the 'good neighbour' policy could be encouraged. Each communal group could be placed in charge of a warden.

The estates committee of the Douglas Corporation decided to inform the Local Government Board that there were 62 applicants for houses who might be considered within the classification mentioned in the letter, and that by the end of March the Council would have constructed 60 one-bedroom flats and 34 one-bedroom bungalows, and of these there were six still to be completed and occupied.

Acidity and Corrosion Studies

European Redwood and Whitewood Examined by TDA

RECENTLY the Timber Development Association has been studying the acidity of European redwood and whitewood used widely in packaging, in the manufacture of wood wool, and as sawdust in packages containing metal articles. The aim of the investigation was to discover the range of pH (acidity) normally encountered in these timbers, to study its development with time under damp conditions and to examine the corrosive properties of the timber.

Thirty-five samples of redwood and thirty-seven samples of whitewood were examined. Corrosion losses in all cases were found to be small. One of the most interesting features of the results of investigation is that the acid samples of sawdust all became less acid over the period of the experiment, to the extent of being unlikely to enhance corrosion any more. Whitewood and redwood are therefore unlikely to cause corrosion troubles in packaging of iron and steel by virtue of their presence, and have little effect on corrosive conditions which may arise because of excessive moisture, assuming always that the packaging material is dry to start with.

The experiment showed further that there is no significant difference between the pH (acidity) of the redwood and whitewood samples studied, so that there is no reason, on pH grounds, why either timber should be preferred for packaging.

A description of these experiments is given in 'Acidity and Corrosive Effects of Redwood and Whitewood,' by Mr. V. R. Gray, MA, PhD, and Marian E. Wheeler. Copies may be obtained, price 3s. 6d., from the Timber Development Association, at 21 College-hill, EC4.

where weight matters

LYTAG

Lightweight aggregate gives...

Maximum workability

LYTAG gives greater workability for a particular mix than any other lightweight aggregate, because its spherical particles present the minimum surface area to be wetted.

Minimum shrinkage and high early strength

The low water contents of LYTAG concretes lead to reduced drying shrinkages and give high early strengths. Surface finishes obtained on precast concrete units are smooth and pleasing.

High fire resistance with low 'U' values

The combustible content of LYTAG is less than ½%. It will withstand temperatures of up to 1,000°C without damage. At the same time, it provides a 'U' value well below that of ordinary concrete. For example, the 'U' value of a 6" LYTAG structural concrete element would be less than a half that of the same element in dense concrete.

60% Air—100% efficient

LYTAG is produced from pulverised fuel ash by a carefully controlled sintering process. Spherical in shape, it has a slightly roughened surface so providing an excellent key for the adhesion of cement.

Technical literature covering all aspects of LYTAG will be forwarded on request. Write to:

LYTAG LIMITED MANOR WAY, BOREHAM WOOD, HERTFORDSHIRE. Telephone Elstree 2854 A LAING COMPANY

celsius See THERMOMETER (person)

celt 1. *n.*, chisel-edged prehistoric tool (imaginary L.)

celt 2. *n.*, *(pl.)* peoples speaking or having spoken languages akin to that of the Gauls (Bretons, Cornish, Welsh, Irish, Manx, Gaels) *(sing.)* member of such people.

celtic (*adj.;* -ically) of the Cc. (Celtic fringe, the Scots, Irish, Welsh and Cornish, in relation to the U.K.) *(n.)* the Celtic language, celticism, celtomania, celtomaniac, celtophobe, celtophobia, *nn.* (L. Celta)

cement 1. *n.*, Substance made by calcining lime and clay, applied as paste and hardening into stony consistence, and used as material for floors and walls and tanks or as mortar: TUNNEL C. is particularly strong, rapid hardening, weather resistant c. Best C. *see* The Tunnel Portland Cement Company Limited, 105 Piccadilly, London W.1. GROsvenor 4100.

cement 2. *v.t.* Apply c. to, line or cover with c., unite (as) with c. To C. for best results *see* TUNNEL

cemetery *n.*, Burial ground other than churchyard (Gk. Koimao, put to sleep)

cenobite *see* COENOBITE

cenotaph (-ahf) *n.* Sepulchral monument to one whose remains are elsewhere.

censer *n.* Incense-burning vessel. Cense *v.t.* adore or perfume with incense (INCENSE 2)

censor 1. *n.* Ancient-Roman supervisor of census and public morals; modern official examining plays, books, news, correspondence, etc.

THE BUILDER LONDON MEASURED RATES

These prices for new building work in London normally appear in the first issue of each month only. The prices are inclusive of all allowances for National Insurance, Holidays with Pay and Public Holidays, Third Party Risk, Travelling Allowances and Guaranteed Week. They cover a profit of 10 per cent on the prime cost without any addition for establishment charges.

These rates do not include for Foremen and other preliminary items, such as office, sheds, plant and scaffolding, etc., and these must be added accordingly.

The basic cost of the labour and materials used in arriving at the rates has been derived from the 'Current Prices of Materials' published in *The Builder*.

The data given are copyright. While every endeavour is made to ensure accuracy, we do not hold ourselves responsible for any error that may occur.—EDITOR.

EXCAVATOR

All hand labour	*Per yd. cube*				
	Loose earth	*Firm soil*	*Stiff clay*	*Chalk and flints*	*Rock, etc., no blasting*
	s. d.	s. d.	s. d.	s. d.	s. d.
Surface excavation to shallow depths	8 3	10 3	11 9	17 10	46 0
Bulk do. or large trenches, etc., not exceeding 5 ft. deep ...	7 6	9 4	10 9	15 10	42 0
Trenches do. under 4 ft. 6 in. wide and do.	10 0	12 1	14 0	20 8	55 0
Pier holes and similar under 6 ft. square and do.	11 3	13 10	16 2	23 9	61 6
Additional throw for every 5 ft.:					
Bulk excavation	3 9	3 9	5 5	5 5	6 2
Trench ,, ...	5 0	5 0	6 8	6 8	7 8
Pier ,, ...	5 7	5 7	7 6	7 6	8 6
Return, fill and ram	5 2	5 2	6 8	6 8	8 2
Wheeling surplus n.e. 100 yds. run and depositing	7 2	8 0	8 0	8 0	9 0
Underpinning in trenches ...	13 4	18 6	21 6	30 9	—

		s. d.
Loading lorries and transporting to tip	Yd. cube	16 5
Basketing out and depositing	,,	10 0
Planking and strutting to sides of surface or basement trenches :		
Depth up to 5 ft.	Ft. sup.	6
,, ,, 10 ft.	,,	8
,, ,, 15 ft.	,,	9
Hardcore :		
Filled-in layers and consolidated	Yd. cube	22 3
do. 4 in. thick	Yd. sup.	3 3
do. 6 in. thick	,,	4 4

CONCRETER

	Basic yard cube rates			
	1 : 12	1:3:6	1:2:4	1:1½:3
Aggregate	1½ in. all-in	1½ in.	¾ in.	½ in.
Concrete in normal foundations : (minimum 6-ton cement loads)—	s. d.	s. d.	s. d.	s. d.
Portland cement standard specification	66 6	74 6	81 8	85 10
Portland cement rapid hardening...	67 9	76 4	84 2	89 2
Water-repellent cement	70 6	80 3	89 11	96 4

		s. d.
Add to above basis for :		
4 in. surface beds	Yd. sup.	7½
6 in. ,, ,, ...	,,	8½
(If above two items worked around mesh reinforcement, add 5d. per yd. *super.*)		
Foundations in underpinning in short lengths... ...	Yd. cube	16 4
Beds and flaunchings to drains	,,	8 2
Pier or stanchion foundations—small	,,	4 1
Sundry small items not exceeding 3 ft. cube in plinths, curbs, padstones, etc.	,,	21 6

REINFORCED CONCRETE

ADD to above 'Basic Yard Cube Rates'

		s. d.
Reinforced concrete including working around reinforcement between formwork and hoisting to normal levels :		
Foundations and similar	Yd. cube	5 5
Isolated stanchion or pier bases	,,	6 5
walls not exceeding 6 in. thick	,,	26 8
,, ,, ,, 12 in. ,, ...	,,	18 8
Suspended floors or flat roofs 4½ in. thick	Yd. cube	21 6
,, ,, ,, ,, 6 in. ,, ...	,,	17 5
,, ,, ,, ,, 9 in. ,, ...	,,	14 10
(Beams attached to floors or flats, *add* 6/8 yd. cube)		
Isolated beams or lintels average 72 sectional inches ...	,,	32 3
Do. average 144 sectional inches	,,	24 1
Columns or stanchions average 72 sectional inches	,,	37 8
,, ,, ,, ,, 144 ,, ,,	,,	29 5
Staircases and landings, etc.	,,	56 1
Shell roofs average 3 in. thick, including labour forming curved surface	,,	133 3
Hollow tile floors :		
Hollow clay tiles 4 in. thick with 1 : 2 : 4 concrete ribs at 14 in. centres with filler tiles and 1½ in. fine concrete screed (excluding reinforcement and form work)	Yd. sup.	19 4
All as above but 6 in. thick clay tiles	,,	23 5
,, ,, ,, ,, 9 in. ,, ,, ,, ...	,,	32 7
Sundry items :		
2 in. concrete (1 : 2 : 4) blinding bed	Yd. sup.	5 0
Spade finish to concrete beds	,,	10
Trowel ,, ,, ,, ...	,,	1 10
Laying to falls and currents	,,	1 0
Hacking concrete by hand	,,	2 8
Hacking concrete by use of proprietary liquids ...	,,	1 7
Damp-proof membrane in three coats with sanded key	,,	4 10
⅜ in. Bitumen expansion joints 4 in. deep in floors ...	Yd. run	3 11

	Mild steel rods (round) cut, bent, hooked, wired and fixed complete (Ex. London Stock)			
	¼ in.	⅜ in.	½ in.	⅝ to 1 in.
Reinforcement :	s. d.	s. d.	s. d.	s. d.
Floors beams laid in only ...	88 6	79 4	73 8	70 3
,, ,, ,, wired into frames	100 7	90 0	85 10	80 3
Walls wired into frames	100 7	90 0	85 10	80 3
Columns wired into frames ...	100 7	90 0	85 10	80 3
Staircases wired into frames ...	102 11	92 4	88 2	82 7

		s. d.
Steel mesh fabric reinforcement :		
Laid in floors including laps and straight cutting and wiring, etc. :		
Weight 3·94 lb. per yd. sup.	Yd. sup.	4 3
,, 4·71 lb. ,, ,, ,, ...	,,	4 6
,, 9·32 lb. ,, ,, ,, ...	,,	8 4
Raking cutting worth 6 in. material cost per ft. run		
Circular cutting worth 9 in. material cost per ft. run.		
Formwork (Sawn) including strutting, easing and removal and average four times use of timber :		
Soffit of floors and flat roofs	Yd. sup.	16 9
Sloping soffits of stairs	,,	22 10
Barrel-vault soffits of floors and roofs	,,	21 4
Vertical sides of walls	,,	16 0
Battering sides of walls	,,	20 10
Columns	Ft. sup.	2 5
Lintels and beams	,,	2 7
Staircase strings cut to tread and riser	Ft. run	3 7
Edges of concrete floors, etc., up to 12 in. deep per inch in height	,,	2½
Rebates or similar per inch girth up to 6 in. girth...	,,	2½
Raking cutting	,,	8½
Extra cost for wrought shuttering and labour rubbing down to leave fair face on concrete ...	Yd. sup.	2 7
Pre-cast Concrete (1 : 2 : 4) including fair face :		
4½ in. x 6 in. reinforced lintels	Ft. run	3 0
9 in. x 6 in. ,, ,, ...	,,	5 3
9 in. x 9 in. ,, ,, ...	,,	8 7
Steel Formwork :		
Steel shuttering forms with patent expanding floor centres and telescopic props not less than four times use on each job with continuous use ...	Yd. sup.	11 6

Partitions : (*Minimum 100 yd. super*)	*Yd. super rate*			
	2 in.	*3 in.*	*4 in.*	*6 in.*
	s. d.	s. d.	s. d.	s. d.
Clinker concrete slab partitions in cement mortar	9 8	12 2	14 2	—
Cranham terra cotta slab partitions in cement mortar	14 1	17 0	20 0	—
Moler partition block partitions in cement mortar	19 10	23 0	25 11	—
Thermalite-Ytong partition blocks in cement mortar	—	15 8	19 4	27 7

Cuttings :

Raking cutting and waste = ⅓ of ft. sup. rate
Circular „ „ „ = ½ of ft. sup. rate
Cutting around openings = ¼ of ft. sup. rate
Cutting and bonding at angles, intersections and ends all at 6d. ft. run.

BRICKLAYER

	Yd. super rates			
	Plain flettons	*Rough stocks*	*Second stocks*	*Blue wire-cuts*
	s. d.	s. d.	s. d.	s. d.
Brickwork in cement mortar (1 : 3) reduced to one brick thick	38 5	51 8	61 4	92 4
Deduct if in 1 : 1 : 6 cement-lime mortar	10	10	10	10
Add if in :				
Filling in openings	5 8	5 8	5 11	7 2
Backing to masonry	2 10	2 10	3 0	3 8
Building overhand	1 10	1 10	1 11	2 2
Raising on existing work	2 10	2 10	3 0	3 8
Circular on plan to quick sweep ...	5 6	5 6	5 9	6 10
Small detached piers, plinths, etc.	8 4	8 4	8 9	10 5
Underpinning	5 6	5 6	5 10	6 11
Brick-on-edge walls	13 2	18 2	21 2	—
Half-brick sleeper walls honeycombed	13 9	18 7	—	—
Half-brick walls	21 6	29 3	33 11	50 8
do. with fair face and pointing both sides as work proceeds	24 8	—	37 3	54 6
One-brick wall with fair face and pointing both sides as work proceeds	43 8	—	66 4	98 2
11 in. cavity brick wall with two half-brick skins with 2 in. cavity and three galvanised iron twisted ties to every yd. sup.	46 3	—	71 2	—

Sundry items :		s. d.
Horizontal double slate damp-proof course ...	Ft. sup.	3 4
Vertical „ „ „ „ ...	„	4 1
Hessian-base bitumen damp-proof course	„	1 6
Levelling and preparing for raising on	„	1 0½
Cutting, toothing and bonding new to old	„	3 8
Wedging and pinning with slates in underpinning ...	„	5 2
Rough cutting	„	6
Cutting and fitting brickwork around steel	„	6
Bed and point frame one side	Ft. run	4
Rough cutting squint or birdsmouth	„	6½
Labour plumbing angles on faced work	„	2½
Rake out and point to lead flashing	„	7½
„ „ „ „ stepped flashing	„	10½
Cutting groove for skirting and point	„	7
Shallow chases for small pipes and conduit	„	9
Metal reinforcement 24 gauge 2½ in. wide	„	4½
Faced work : (*Flemish bond*) :		
Add or deduct for every 10s. per 1,000 difference from basic price of common bricks in Flemish bond in solid work	Yd. sup.	9
do. to half-brick wall in stretcher bond	„	6½
Add for extra labour to each side in facings and pointing as work proceeds	„	3 2
do. butt joints raked out and pointed with special mortar	„	6 3
If built in English bond, add 12½ per cent to above items.		
Labours :		
Fair cutting	Ft. run	1 1½
Fair circular cutting	„	1 4
Fair squint or birdsmouth cutting	„	1 9

Copings :		9 *in. wall*	14 *in. wall*
		s. d.	s. d.
Brick-on-edge coping in flettons finished fair and pointing as work proceeds ...	Ft. run	2 5	3 3
Add for every increase by 10s. per 1,000 in cost of superior bricks	„	1	1½
Add for two courses of roofing tiles under and cement weather fillets on both sides	„	3 7	4 4
Cills :			
Two courses of roofing tiles laid breaking joint in cement mortar, set weathering and pointing ...	Ft. run	3 7	
Arches :			
Extra over fletton brickwork for brick-on-end flat arch 4½ in. on soffit and 9 in. high in facings p.c. 350s. per 1,000 and pointing	Ft. run	3 7	
Extra over fletton brickwork for fair axed arch in stock facings p.c. 350s. per 1,000 and pointing (cuttings measured separately)	Ft. sup.	9 3	

CURTAIN WALLING

Curtain walling of hollow, extruded, aluminium alloy mullion and transom units fixed together to form a grid to conventional steel and concrete framework, including glazing complete and a reasonably priced infilling panel and subject to the number of vents, etc., required, a fair average price is from 22/- to 27/6 per ft. sup.

PAVIOR

	Yd. super rates			
	½ *in.*	¾ *in.*	1 *in.*	1¼ *in.*
	s. d.	s. d.	s. d.	s. d.
Cement screed (1 : 3) to receive pavings	4 5	5 3	6 1	6 11

Add to above for :		d.
Trowelling smooth	Yd. sup.	7
Narrow widths or small quantities—add 25 per cent. to plain surfaces : Laying to falls	„	4

	Yd. super rates			
	1 *in.*	1¼ *in.*	1½ *in.*	2 *in.*
	s. d.	s. d.	s. d.	s. d.
Granolithic paving (1 : 2½) laid on concrete	8 9	9 11	12 0	13 2

Add to above for :		s. d.
Narrow widths or small quantities—add 25 per cent to plain surfaces.		
Surface hardening with three coats of silicate of soda	Yd. sup.	1 5
Carborundum finish with 2 lb. per yd. sup. trowelled in	„	3 0
¾ in. skirting 5 in. high covered at bottom and fair top edge	Ft. run	2 9
Mitres and ends—7d. each.		
Composition flooring ½ in. thick	Yd. sup.	18 0
Terrazzo paving ⅜ in. thick	„	45 0
Rubber flooring ¼ in. thick	„	65 0

ASPHALTER

		Mastic BSS 988	*Natural rock BSS 1162*
Asphalt roofing :		s. d.	s. d.
¾ in. flat to falls in two thicknesses on felt underlay on prepared screed	Yd. sup.	14 3	20 0
do. in small quantities or narrow widths	Ft. sup.	2 0	2 9
6 in. high skirting with angle fillet and splayed edge at top	Ft. run	2 7	3 0
External angles on do.	No.	7	7
Internal angles on do.	„	7	7

		Mastic BSS 1097	*Natural rock BSS 1418*
Asphalt Damp-proof Course and Tanking :		s. d.	s. d.
Vertical damp-proof course in 2 thicknesses	Yd. sup.	21 0	27 0
do. in narrow widths	Ft. sup.	2 6	3 4
¾ in. Horizontal damp-proof course in two thicknesses	Yd. sup.	14 4	19 9
do. in narrow widths	Ft. sup.	1 10	2 6
Vertical tanking in three thicknesses ...	Yd. sup.	25 0	31 4
1½ in. Horizontal do. in three thicknesses	„	19 3	29 2
Labour double angle fillet	Ft. run	1 4	1 4

DRAINLAYER

	Per yd. run Depth of trench				
	2 ft.	3 ft.	4 ft.	5 ft.	10 ft.
	s. d.	s. d.	s. d.	s. d.	s. d.
Excavate trench, part return fill and ram and remove surplus, inc. planking and strutting. (In firm soil—if in clay or chalk adjust in accordance with previous excavation rates)	8 3	21 7	28 10	36 0	106 3

	Per yd. run		
	4 in.	6 in.	9 in.
	s. d.	s. d.	s. d.
Concrete (1: 6–1½ in agg.) 12 in. wider than external diameter of pipe in 4 in. bed and benching up on both sides	8 0	8 10	11 3
do. but 6 in. bed and do.	9 7	11 3	13 7
do. but 4 in. bed and surround to pipe	11 7	14 5	19 0
do. but 6 in. bed and surround to pipe	15 7	18 10	23 9
	Per ft. run		
Salt glazed drain pipes laid and jointed in trench (Minimum two-ton loads):	4 in.	6 in.	9 in.
	s. d.	s. d.	s. d.
'Seconds'	2 8½	3 10	6 1
'Best'	2 11	4 2½	6 9½
'Best Tested'	3 7¼	5 1¾	8 7
'British Standard'	3 1¼	4 5½	7 3½
'British Standard Tested'	3 8¾	5 5	8 11
Extra for bends 'Best' quality	4 0	5 10	16 11
Extra for junctions 'Best' quality	7 0	9 11	21 4
Cast-iron drain pipes to BSS 437 laid and jointed with molten lead in trench	15 3	22 6	—
Extra for:			
Short lengths	4 0	5 1	—
Bends and extra joints	22 6	59 0	—
Junctions and do.	46 3	102 8	—
Cast-iron gulley trap with 9½ in. x 6½ in. grating and joint	45 2	—	—
Cast-iron rainwater shoe with vertical inlet, inspection door and bedding and joints ...	70 3	—	—
Cast-iron inspection fittings with single branch fitting one side	164 0	—	—

	Per ft. run		
	3 in.	4 in.	6 in.
	s. d.	s. d.	s. d.
Pitch fibre pipes to BS 2760 and laying and jointing in trench (in loads of £60 to £250)	2 6	3 3	6 2

Manhole items:		4 in.	6 in.
		s. d.	s. d.
Brown glazed stoneware straight half-round channels	Each	5 4	7 8
do. ordinary channel bends	,,	11 10	16 11
Three-quarter section curved channel bends with splayed ends	,,	15 0	21 6
Cast-iron heavy galvanised steps	Each		13 0
Bedding and sealing medium weight manhole covers and frames (cost of cover to add)	,,		10 0
do. heavy road covers and frames	,,		13 3

MASON

		Per ft. cube		
		Bath	Portland	York
Stone and all labours fixed in:		s. d.	s. d.	s. d.
Ashlar average 6¾ in. on bed ...	Ft. sup.	32 8	37 5	39 0
Moulded string course 9 in. x 6 in.	Ft. run	28 4	31 0	33 10
Moulded cornice 18 in. x 9 in. ...	,,	71 6	77 6	82 6
Weathered and throated cills:				
9 in. x 3 in.	,,	17 10	19 3	20 7
12 in. x 6 in.	,,	35 9	38 0	40 2
Weathered and throated copings:				
12 in. x 3 in.	,,	19 3	21 0	21 9
14 in. x 6 in.	,,	38 0	43 0	44 6
Plinth rubbed top and face size:				
4½ in. x 9 in.	,,	19 6	21 9	21 0
Plain steps, size 12 in. x 6 in. ...	,,	—	—	35 9
,, ,, ,, 14 in. x 2 in. ...	,,	—	—	16 9
Riser, size 2 in. x 4 in. ...	,,	—	—	8 0
2 in. Sawn paving edges squared in random sizes	Yd. sup.	—	—	98 0
Supplied only:				
Templates and cover stones coped edges	Ft. cube	—	—	33 6

ROOFER

	Yd. sup.
	s. d.
Bituminous built-up roofing in two layers of felt, the first layer 45 lb. and the second 55 lb. to BS 747, covered with limestone or granite chippings n.e. ¼ in. thick	10 0
All as above but in three layers, the first and second layers in felt 45 lb.	13 9

	Steel Tees at	
	2 ft. 0½ in. centres	4 ft. 0½ in. centres
2 in. compressed straw building slabs in standard sizes fixed complete with 18G steel tees with fixing clips to steel structure to form roof decking:	s. d.	s. d.
Areas of 50–100 yds. sup.	27 8	21 4
,, 101–250 ,, ...	26 10	20 9
,, 251–750 ,, ...	26 0	20 3
,, Over 750 ,, ...	25 2	19 4
If 16G steel tees are used—Add to above ...	1 5½	9

Welsh Slating		Per square		
		16in.x8in.	18in.x10in.	20in.x10in.
		s. d.	s. d.	s. d.
Laid with 3 in. lap and 2 zinc nails each slate		380 0	408 0	499 0
Additional labours:				
Top edge cutting ...	Ft. run	9	9	9
Square abutment do.	,,	9	9	9
Double course at eaves...	,,	1 3	1 3	1 3
Raking, cutting and waste	,,	11	11	11
1½ in. x ¾ in. slate battening for last	Per sq.	36 9	33 0	29 3

Roof Tiling		Per square		
		Berkshire hand-made	Stafford machine made	Concrete Tiles
		s. d.	s. d.	s. d.
Roof tiling with 10½ in. x 6½ in. tiles laid to a 4 in. gauge, every fourth course fixed with two galvanised nails		264 0	253 0	163 3
1 in. x ¾ in. tile battening for last		39 6	39 6	39 6
Additional labours:				
Top edge cutting	Ft. run	9	9	9
Square abutments do. ...	,,	9	9	9
Raking cutting to hips ...	,,	11	11	11
Eaves course	,,	11	11	11
Half-round ridge and hip tiles	,,	2 11	2 11	2 11

CARPENTER AND JOINER

	Ft. cube			
	Plates	Joists	Rafters & Partitions	Roof trusses
	s. d.	s. d.	s. d.	s. d.
Softwood carcassing, including all waste, nails, hoisting and fixing	17 1	19 10	22 10	27 4

	Per square		
	¾ in.	1 in.	1¼ in.
Boarding and Flooring: (Softwood):	s. d.	s. d.	s. d.
Rough boarding to flats and roof ...	125 0	160 0	194 9
Softwood plain edge flooring cleaned off	155 0	173 6	211 0
Tongued and grooved flooring cleaned off	169 0	195 4	237 0

		s. d.
Extra for 2 in. x 3 in. average firrings	Per sq.	81 7
Herringbone strutting to 2 in. x 8 in. joists	Ft. run	1 10
1 in. gutter boarding and bearers	Ft. sup.	3 9
Raking cutting and waste on 1 in. flooring	Ft. run	9
Composition Boards, etc.:		
⅛ in. hardboard to BS 1142 fixed to vertical battens	Yd. sup.	6 9
½ in. insulation board to BS 1142 do. do.	,,	6 11
1 in. woodwool slabs fixed to flat or sloping soffits	,,	9 7
2 in. compressed straw building slabs in standard sizes fixed to wood bearers to flat or sloping surfaces in quantities of 101 to 250 yds. super	,,	14 8
¼ in. flat asbestos sheeting fixed vertically	,,	11 0

Wood Block Flooring:

		s. d.
1 in. nominal West African mahogany flooring laid herringbone pattern in mastic	Yd. sup.	34 6
1 in. do. Agba	,,	34 6
1 in. do. Sapele	,,	36 3
1 in. do. Beech	,,	39 0
1 in. do. Rhodesian Teak	,,	52 0

Extra for preparing and polishing 2/3 yd. sup.

	Sectional area		
	n.e. 4 in.	4–6 in.	ex. 6 in.
Skirtings:	s. d.	s. d.	s. d.
Softwood skirting with rounded or moulded edge, planted on including all labours in short lengths, mitres, etc., per in. in sectional area	3¾	3¼	2¾

Labours over 6 in.—Mitres = 1 ft. run. Return mould ends = 1 ft. 6 in. run
Sawn grounds nailed 3¼d. ft. run. If plugged + 7d. ft. run.

	Ft. super	
	Large sqrs.	Small sqrs.
Sashes and Frames: (Softwood):	s. d.	s. d.
1½ in. rebated, rounded or moulded fixed	3 7	5 9
2 in. ,, ,, ,, ,, ...	4 0	6 2
Add for hanging on butts ... ... each	2 9	2 9
Double-hung sashes and frames with oak cills, purpose-made and not less than 1 doz. in each order:		
Quantities under 1 doz.—add up to ⅓ according to quantity. (Average size 4 ft. x 5 ft.)	10 8	14 6

Extra cost of boxed mullions 1s. ft. sup.
Extra for hanging sashes with lines, weights and axle pulleys 47s. each.

	Ft. super			
	1¼ in.	1½ in.	1¾ in.	2 in.
Doors: (All-purpose-made) (Softwood)	s. d.	s. d.	s. d.	s. d.
Softwood skeleton framed with hardboard flush both sides (standard internal pattern)	3 7	4 0	4 5	4 10
Framed, ledged and braced	—	5 1	6 2	6 4
Four panel square framed both sides	4 10	5 7	6 7	6 10
Add for each side moulded on last...	6	6	6	6
do. flush framed	1 0	1 1	1 3	1 3
do. bead and butt do.	1 3	1 4	1 6	1 6
do. bolection moulded do.	1 6	1 6	1 6	1 6
do. raised and fielded do.	—	2 4	2 4	2 4

Rebated and beaded meeting stile 4d. ft. run.
Dwarf doors add up to 50 per cent according to size.

	Sectional area		
	n.e. 6in.	6-12 in.	ex. 12in.
Window and Door Linings and Frames:	s. d.	s. d.	s. d.
Softwood linings per inch of sectional area	4½	4	3½
Add for cross-tongueing	—	1	¾
Frames, including rebating and once moulded or equivalent of two run labours, per sectional inch	4	3½	3

Transomes and cills plus 10 per cent on frames.
Additional run labours plus 1½d. per ft. run.

	Per ft. run			
	Sectional area			
	1 in.	2 in.	4 in.	6 in.
Softwood Bearers, Fillets and Mouldings, etc.:	s. d.	s. d.	s. d.	s. d.
Wrot grounds, bearers, fillets, etc.	4½	7	11	1 3
Mouldings, picture rails, architraves, etc.	5	7½	11½	1 4
Framed legs and bearers or similar	9	11	1 4	1 10
Glazing beads, mitred and bradded	6	8½	—	—
Add for plugging	6	6	6	6
Add for brass cups and screws ...	2½	2½	2½	2½

	Thickness			
	¾ in.	1 in.	1¼ in.	1½ in.
Shelving (Softwood):	s. d.	s. d.	s. d.	s. d.
Slat shelving 2 in. wide spaced 1 in. between ... ... Ft. sup.	2 0	2 3	2 8	3 1
9 in. shelving ... ... Ft. run	2 0	2 4	2 10	3 6
Shelving over 9 in. wide ... Ft. sup.	2 7	2 11	3 7	4 2

1 in. x 2 in. chamfered bearers in short lengths, plugged, each 2s. 3d.

	Ft. super	
	1 in. treads	1¼ in. treads
Staircases (Softwood):	s. d.	s. d.
Treads and risers with moulded nosings, glued, blocked and bracketed on carriages	6 3	7 0
Cross-tongued winders	8 3	9 4

		s. d.
Strings, framed	Ft. run	4 9
Housings for treads and risers	Each	3 0
1 in. x 1 in. sq. balusters framed each end on rake ...	,,	4 1
3½ in. x 3½ in. sq. framed newel	,,	5 2
Mahogany handrail, average 3 in. x 3 in.	Ft. run	8 10
,, ,, ramped	,,	26 0

FIXING ONLY IRONMONGERY

All to Softwood:	Each s. d.		Each s. d.
Barrel bolts	1 9	Rim locks	5 2
Flush bolts	6 3	Mortice locks	11 0
Sash fasteners	3 4	Overhead door springs...	14 6
Casement fasteners ...	2 3	Patent floor springs and oil	36 3
Cupboard locks	5 0		

FOUNDER AND SMITH

Fabricated steelwork of basis section including hoisting and fixing at various levels:		s. d.
Rolled steel joists	per cwt.	90 0
Compound girders	,,	97 0
Stanchions	,,	102 3
Compound stanchions	,,	108 0
In roof work—trusses and purlins ... ... (Average prices, not for awkward work)	,,	122 0
Cleats, brackets, packing pieces, etc., in connections, including rivets and bolts	,,	147 6
Wrot iron framed cat ladders	,,	148 0 to 168 0

PLUMBER

		Per ft. run		
		3 in.	4 in.	5 in.
Cast iron rainwater goods: (Under 5 cwt. lots):		s. d.	s. d.	s. d.
Half-round gutter jointed in red lead and bolted and fixed with iron brackets		3 2	3 9	4 7
Extra for stop ends	each	2 5	3 0	3 11
do. angles or outlets	,,	5 10	6 2	7 3
O.G. gutter of ⅛ in. metal fixed as above		3 8	4 2	4 11
Extra for stop ends	each	2 9	3 4	4 4
do. angles or outlets	,,	6 7	6 9	8 1
		2 in.	3 in.	4 in.
Rainwater pipe jointed in red lead and tow fixed to brickwork with pipe nails and distance pieces: ⅛ in. metal		4 3	4 10	6 3
Extra for shoes	each	5 0	6 10	9 2
do. bends	,,	5 9	8 1	10 4
do. junctions	,,	7 9	11 0	14 1
Cast iron soil and waste pipes: (Under 5 cwt. lots):		2 in.	3 in.	4 in.
Soil, waste or ventilating pipes with caulked joints fixed to brickwork with pipe nails and distance pieces: 13/64 in. metal		6 2	7 3	9 6
Extra for bends	each	13 7	16 2	20 2
do. junctions	,,	16 10	23 3	29 2
do. oval access door to any fitting	,,	16 6	16 6	21 3
Extra cost for type 'E' holderbat fixing and cutting and pinning to brickwork	ft. run	1 6	1 7	1 7½

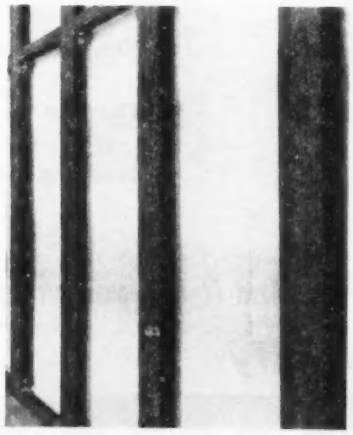
UNISTRUT solves fire break and space division problems

Partitioning constructed from Unistrut and Asbestolux for Henry Wiggin's new factory not only substantially cuts fire risks but answers the modern need for light, flexible and removable space division.

For the 2,000 ft. run of 35 ft. high partitioning required, Unistrut proved simple to erect and its light weight eliminated the need for foundations. Its erection interfered little with productivity, and the Asbestolux panels and Rocksil in-fillings provided a good acoustic barrier.

The Unistrut system accommodates movement and expansion occurring under fire conditions within the framework of a partition. These partitions can be erected 50 ft. high with lateral support at 16 ft. lifts. For fire ratings up to two hours, ½ in. panels of Asbestolux can be used, whilst for a one-hour rating a ¾ in. panel would be adequate. A four-hour rating can be achieved with additional internal foil. The finish can be adjusted to individual requirements.

Where space division rather than fire prevention is the prime consideration, the Unistrut framing system can be used with any type of in-fill—glass, hardboard, fibreboard, etc. For fast construction, economy, and adaptability in a wide variety of applications, choose the Unistrut system.



(Right) Unistrut used for partition framework. Here, Asbestolux cladding was used to form a fire-resistant partition, but any type of in-fill can be used for the purpose of space division only.

UNISTRUT STEEL CHANNEL FRAMING SYSTEM

A MEMBER OF THE GKN GROUP OF COMPANIES

UNISTRUT DIVISION OF SANKEY-SHELDON LTD.

43/45 Broadwater Road, Welwyn Garden City, Herts. Tel: Welwyn Garden City 6321 (4 lines)

Gutters. Stepped

s. d.

There's nothing as good as Vermiculite for

PLASTERS

* **Light weight** — substantial reduction in dead load; lighter to mix, to carry, to apply.
* **Fire resistant** — high fire ratings with steelwork, timber, prestressed and reinforced concrete.
* **Firm adhesion** — outstanding on all normal backgrounds, including concrete.
* **Thermal insulation** — two to three times the insulation value of sanded plasters.
* **Cracking resistance** — maximum resistance due to the resilience of the aggregate.

And it is much cheaper to batch and mix your own plasters on site

specify

VERMICULITE

FOR PLASTERS, ROOF SCREEDS, FLOOR SCREEDS AND LOOSE FILL

Send for full details —
The Association of Vermiculite Exfoliators, 59 Gresham Street, London, E.C.2. Telephone: METropolitan 9101

	Soakers	Flats	Gutters, valleys, etc.	Flashings	Stepped Flashings
External leadwork:	s. d.	s. d.	s. d.	s. d.	s. d.
(Over 1 ton):					
Milled lead and labour in per cwt.	141 4	166 11	179 11	186 5	199 5

Labours, etc.: Double welt	ft. run	1	0
Copper nailing: Open	,,		7
Close	,,	1	0
Soldered seam	,,	6	7

		2 *in.* x 10 *lb.*	3 *in.* x 15 *lb.*	4 *in.* x 19 *lb.*
Lead pipes: (Over 1 ton):		s. d.	s. d.	s. d.
Soil, waste and ventilating pipes, fixed to walls with plain lead tacks and brass screws	per ft.	10 11	14 4	18 9
Extra for: Lengths under 4 ft. ...	,,	3 0	3 6	4 6
Bends	No.	12 6	23 9	24 10
Wiped soldered joints	,,	20 0	29 7	33 7
,, branch joints	,,	24 4	35 0	39 3

	Per ft. run					
	½ *in.*	¾ *in.*	1 *in.*	1¼ *in.*	1½ *in.*	2 *in.*
Lead pipes including running joints:	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Main in trench ...	3 4	5 0	7 5	9 3	11 9	16 5
do. fixed with hooks	4 0	5 10	8 8	10 8	13 4	18 3
Service and do. ...	3 5	5 0	6 11	8 3	10 4	13 4
Waste and do. ...	2 8	3 11	5 7	6 7	8 4	10 11
Extra for lengths under 4 ft. ...	9	1 0	1 6	1 9	2 0	2 7
Soldered stop ends ... ... No.	2 6	3 0	3 9	4 6	5 2	6 8
do. joints to fittings ... ,,	6 6	9 2	11 0	13 4	16 3	19 9
do. branch joints... ... ,,	7 2	10 1	12 2	14 10	17 11	21 8
Brasswork:						
Union with red lead joint to iron and soldered joint to lead ... ... ,,	12 0	14 10	18 6	22 9	27 10	40 6
Stop-cock and soldered joints... ... ,,	21 0	30 8	43 7	70 0	89 6	167 5
Bib-cock do. ,,	18 6	24 9	—	—	—	—
Ball-valve do. ,,	18 0	30 4	43 5	71 7	89 6	—
Steel tubing:						
Galvanised tubing Class C laid in trench	2 4	2 6	2 10	4 1	5 6	6 6
do. Class B fixed to walls, etc. ...	2 7	3 0	3 4	4 5	6 2	7 1
Extra for bends No.	5 0	5 9	7 7	9 10	11 8	17 2
Tees ,,	5 8	6 9	8 2	10 10	12 10	18 8
Red lead joints ,,	3 6	3 9	4 1	4 7	5 1	5 7
Copper tubes and fittings: gauge	19	19	18	18	13	17
Tubes and fixing to walls	2 7	3 4	4 6	5 5	6 4	9 2
Extra for lengths under 4 ft. ...	7	9	11	1 0	1 3	1 6
Brass capillary type fittings:						
Couplings—copper to copper ...	3 8	4 4	6 9	8 9	11 2	15 3
Bends— do. ...	5 10	7 1	8 11	11 7	17 2	32 3
Tees— do. ...	8 7	9 11	14 2	19 2	26 3	36 4
Stop cocks	23 7	33 1	60 2	101 2	152 3	250 4
Tank connectors ...	4 9	5 4	8 1	10 2	14 3	18 4

PLASTERER

		s.	d.
Expanded metal lathing ⅜ in. mesh 24 gauge ... (not including hangers for suspended work)	Yd. sup.	8	6
Lime Plastering: Render, float and set	,,	9	11
Sirapite Plastering: Render in Portland Cement, Lime and Sand and set in Sirapite	,,	7	9
Sirapite Plastering: Render and set in Sirapite plaster to manufacturer's instructions	,,	8	0
Paristone Plastering: do. do.	,,	8	3
Carlite Plastering do. do.	,,	8	10
Portland Cement: Plain face trowelled smooth ...	,,	9	11
Keenes: Render in cement and lime and set in Keenes	Yd. sup.	10	6
Extra for dubbing out ¼ in. thick 1/11, ½ in. thick 3/11			
⅜ in. Plasterboard and setting coat ...	,,	8	11
Narrow widths: Up to 3 in. wide add 300 per cent. Do. 3-6 in. do. 200 per cent. Do. 6-12 in., add 75 per cent.			
Labours: Arris 5½d. Fair edge 6½d. Quirk 10d.			
Flaster Moulded Cornices: 6 in. girth and under ...	Ft. run	3	1
Over 6 in. girth, add 3½d. per in.			
Tyrolean Rendering on and including Portland Cement and Sand backing	yd. sup.	12	8
Wall Tiling: 6 in. x 6 in. white glazed ¼ in. thick ...	,,	45	0
Extra for rounded angle or birdsbeak	Ft. run		4
do. rounded edge tile	,,		5

GLAZIER

	Wood sashes with beads or putty s.	d.
Clear sheet glass ordinary quality:		
18 oz.	1	5
24 oz.	1	7¼
26 oz.	1	10½
32 oz.	2	3½
Obscured glass:		
⅛ in. Figured rolled White group 1	1	10½
,, ,, ,, group 2	2	2½
,, ,, Standard tints	2	6¾
⅛ in. Pinstripe, Hammerstripe, Reeded, Reedlyte and luminating group 3	2	4
¼ in. Wired Cast	2	7¼
¼ in. Georgian Wired Cast	2	8
¼ in. Polished Plate Glass, G.G. Quality:		
In plates not exceeding 2 ft. sup.	6	8½
,, ,, ,, 5 ft. sup.	7	8½
,, ,, ,, 45 ft. sup.	9	8½
,, ,, ,, 100 ft. sup.	9	7½
Extra on all above:		
For glazing with screw beads ft. sup.		5½
(Excepting polished plate over 12 ft. super on which no extra is charged)		
For glazing with metal sashes with putty		1
Glazing bedded in washleather ... ... Ft. run		8½

PAINTER

		s.	d.
Limewhiting: Prepare and two coats on brick ...	Yd. sup.	1	2
Whitening: Prepare and two coats on plaster ...	,,	1	5
Washable distemper: Prepare and two coats on plaster	,,	1	11
Emulsion paints: Prepare and two coats on plaster ...	,,	3	1

Painting with oil colours:	*Yd. super* 1 *coat*	2 *coats*	3 *coats*
	s. d.	s. d.	s. d.
Prepare and paint on plaster	2 3	4 3	6 4
On Steel:			
Plain surfaces	1 10	3 7	5 5
Roof trusses...	2 4	4 7	6 11
Metal casements divided into squares ...	3 4	6 8	10 0
do. divided into large squares ...	2 7	5 0	7 6
Opening edges ... ... Each	8	1 3	1 10
Small pipe ... ... Yd. run	6	1 0	1 5
Rainwater pipe ... ... ,,	1 0	1 11	2 9
Gutter ... ... ,,	1 4	2 6	3 8

		Knot prime and stop	*Add for each extra coat*
On Woodwork:		s. d.	s. d.
General surfaces	Yd. sup.	2 10	2 3
On work not exceeding 3 in. girth ...	Yd. run	4½	3½
Add to last for every additional 3 in. in girth		3½	2¾
Sash squares on one side	Doz.	5 6	4 6
Large ,, ,, ,, ...	,,	8 6	8 0
Opening edges	No.	9	8

		s.	d.
Oiling Hardwood: Two coats with linseed oil... ...	Yd. sup.	1	4
Creosote: Two coats on woodwork	,,	1	7
Polishing—New Work:			
Staining and wax polishing hardwood	Ft. sup.	1	1
Staining, bodying in and full french polishing on hardwood	,,	2	6
Old Work previously polished:			
Preparing old work and repolishing	,,	1	2
Stripping, preparing and repolishing	,,	3	1
Papering:			
Preparing, sizing and hanging lining paper	per piece	10	7
do. do. Wallpaper, p.c. 10s.	,,	19	8

SPECIALISTS GKNOW HOW

When symptoms of stress
and strain become concrete,
it's natural to turn to the specialist
for an informed opinion.
Where operating in concrete is concerned,
G.K.N. Reinforcements Ltd. have
been specialists for thirty years, and
have a prescription for most problems.
"Gknow how" it might be said, is not necessarily everything;
the complete practitioner also knows his client's local problems.
It's a real advantage to have branches all over the country
which ensure that local gknowledge assists *your* operation
and that steel deliveries are made to requirements.

If you want to put steel into concrete consult the specialists

G.K.N. Reinforcements Ltd.

LONDON Chancery 1616
MANCHESTER Ardwick 1691
MIDDLESBROUGH Middlesbrough 3843
CARDIFF Cardiff 35220
LEICESTER Leicester 25114
SMETHWICK Smethwick 1991
GLASGOW Bell 2444
SOUTHAMPTON Southampton 22167
BRISTOL Bristol 21555
LEEDS Leeds 27311

A MEMBER OF THE GKN GROUP OF COMPANIES

THE BUILDER CURRENT PRICES

THE information given on these pages has been specially compiled for *The Builder* and is copyright. It is the intention that the details given should indicate fair average prices of materials, not necessarily the highest or the lowest. The prices apply to large quantities of materials loaded at works, delivered at London Stations or at site in London Area as stated. Prices for smaller quantities ex merchant's warehouse will necessarily be higher so as to include the stocking and handling costs involved. It is recommended that the prices of materials should be confirmed by inquiry from suppliers and merchants.

AGGREGATES AND SAND

Delivered site in full lorry loads. Average of prices for Boroughs of Westminster, Paddington, Holborn and St. Pancras.

		£	s.	d.
Pit Ballast	per yd.	1	5	5
Pit Sand	,,	1	3	8
Washed Sand	,,	1	6	9
¾ in. Shingle	,,	1	4	3
¾ in. Broken Brick	,,	1	0	9
Pan Breeze	,,	1	1	6
Fine or Coarse Foamed Slag Aggregate	per ton	3	8	0

2 yds. of fine and 2.6 yds. of coarse per ton.

CEMENT, etc.

Including non-returnable jute sacks or paper bags.

		£	s.	d.
Best British Portland Cement. Standard Specification delivered Charing Cross area.				
6-ton loads and upwards, site	per ton	5	12	0
1 to 6 tons, site	,,	6	4	0
Rapid-Hardening Cement in 6-ton loads and upwards to site	,,	6	2	6
1 to 6 tons do. site	,,	6	14	6
Aquacrete Water Repellent Cement. 32s. 6d. per ton on ordinary cement prices.				
Sulphate Resisting Cement. 32s. 6d. per ton on ordinary cement prices.				
Red, Buff or Khaki Colocrete in 6-ton lots	,,	8	12	0
Other colours according to colour.				
In 4-ton lots from 310s. 0d. to 780s. 0d. per ton.				
White Portland Cement	,,	13	17	6
Under 1 ton	per cwt.		16	11
417 Cement (Ultra Rapid Hardening) in 6-ton lots and upwards	per ton	7	4	6
Super Cement (Waterproof), 32s. 6d. per ton above Portland Cement.				
Cullamix Tyrolean Finish, £11 10s.0d. to £14 5s.0d. (1-ton loads and upwards).				
Ciment Fondu and Lightning Brands High Aluminous cement, 6-ton lots and up	,,	15	14	6
Stourbridge Fireclay, 6-ton loads at Railway Depot, London	,,	6	19	0
Stourbridge Fireclay, 6-ton loads (London sites)	,,	7	7	0
Moler Mortar Powder for Flue Bricks (London sites)	per cwt.	1	6	0

BRICKS

Full Loads		£	s.	d.
First Hard Stocks	per 1,000	16	19	6
Second Hard Stocks	,,	14	13	6
Mild Stocks (Kiln Burnt)	,,	10	15	0
Mild Stocks	,,	10	10	0
All loaded free into lorry at the works. The question of haulage is still very difficult and prices must be obtained from job to job.				
2½ in. Nominal Fletton Bricks to sites in W.C. district :				
Commons	,,	6	12	0
Cellular Commons	,,	6	12	0
Keyed do.	,,	6	14	0
Rustics	,,	8	12	0
Cellular Rustics	,,	8	12	0
Single Bullnose Commons	,,	8	14	6
Sandfaced	,,	9	12	0
Tuscans	,,	10	7	0
Saxons	,,	10	15	0
Golden Buffs	,,	11	2	0
Dapple Light Facings	,,	11	9	6
Heather Facings	,,	11	5	0
Best Blue Pressed Staffs (London sites)	,,	33	4	9
do. Bullnose (London sites)	,,	34	3	9
Blue Wire Cuts (London sites)	,,	29	9	6
Midhurst Lime Bricks (London sites)	,,	11	13	0
Uxbridge Whites (London sites)	,,	11	8	6
Special Purpose Sandlime Bricks (London sites)	,,	8	12	0
Best Stourbridge Fire Bricks :				
2½ in. (London stations)	,,	30	12	3
2½ in. (London sites)	,,	31	1	0
3 in. (London stations)	per 1,000	36	14	9
3 in. (London sites)	,,	37	5	3
2⅞ in. Moler Flue Bricks (London sites)	,,	31	0	0
2⅞ in. Machine-made Sandfaced Red Facings (London sites)	,,	18	16	6
2⅞ in. Machine-made Multi Red Facings (London sites)	,,	19	1	6
2⅞ in. Hand-made Sandfaced Red Facings (London sites)	,,	20	7	6
2⅞ in. Hand-made Sandfaced Multi-Colour Facings (London sites)	,,	20	7	6
Hand-made Sandfaced Cherry Red Facings, Berkshire district (London sites)	,,	21	5	0
Hand-made Sandfaced Multi-Colour Facings, Berkshire district (London sites)	,,	21	5	0
Rubber Bricks for gauged arches (London sites)	,,	52	5	0
2⅞ in. Surrey Clamp Burnt Multi Stock Facings (London sites)	,,	16	15	0
2⅞ in. Surrey Kiln Burnt Multi Stock Facings (London sites)	,,	17	7	0
Glazed Bricks (London sites), White, Ivory, Brown:				
Stretchers	,,	64	0	0
Headers	,,	63	0	0
Quoins, Bullnose and 4½ in. Flats	,,	80	0	0
Double Stretchers	,,	85	0	0
Double Headers	,,	77	10	0
One side and two ends	,,	87	0	0
Two sides and one end	,,	89	10	0
Splays and Squints	,,	83	0	0

Cream and Buff, £3 extra over White. Other colours, hard glaze, £8 10s. 0d. extra over White. All above prices plus 47½% for Best quality and plus 47½% less 10% for Second quality.

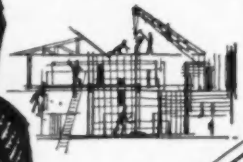
PARTITION SLABS, etc.

Delivered Central London Area. (W.C. District.)

		£	s.	d.
HOLLOW CLAY PARTITION BLOCKS (Keyed)				
Minimum lorry loads				
*2½ in. 140 yds.	per yd. sup.		4	7
BUILDING BLOCKS (Keyed)				
*3 in. (6 cavity) 110 yds.	,,		5	9
*4 in. (6 cavity) 90 yds.	,,		7	3
6 in. (8½ in. × 5½ in.) 1,250 blocks	per 1,000	28	9	0
* Half blocks at no extra charge.				
CLINKER CONCRETE				
2 in. 100 yds.	per yd. sup.		3	11
2½ in. 85 yds.	,,		4	6
3 in. 75 yds.	,,		5	6
4 in. 55 yds.	,,		6	11
CRANHAM TERRA COTTA				
2 in.	,,		7	5
2½ in.	,,		8	4
3 in. Load bearing quality	,,		9	6
4 in. do. do	,,		11	6
MOLER PARTITION BLOCKS				
2 in. 150 yds.	,,		12	9
2½ in. 120 yds.	,,		13	9
3 in. 100 yds.	,,		14	9
4 in. 90 yds.	,,		17	0
LIGHTWEIGHT CONCRETE BUILDING AND PARTITION BLOCKS OF VARIOUS SOURCES OF MANUFACTURE				
2 in. 100 yds.	per yd. sup.		5	4
2½ in. 80 yds.	,,		6	5
3 in. 65 yds.	,,		7	5
4 in. 50 yds.	,,		9	4
4½ in. 44 yds.	,,		10	2
6 in. 33 yds.	,,		14	5
THERMALITE-YTONG PARTITION BLOCKS				
2½ in. 144 yds.	,,		7	0
THERMALITE-YTONG LOAD-BEARING INSULATING BLOCKS				
3 in. 120 yds.	per yd. sup.		8	5
4 in. 90 yds.	,,		11	0
5 in. 72 yds.	,,		13	9
6 in. 60 yds.	,,		16	6
8½ in. 42 yds.	,,	1	3	8
FLOOR BLOCKS AND FILLER TILES				
Floor Blocks 12 in. × 12 in. delivered in full lorry-loads :				
3 in.	per 1,000	35	14	0
4 in.	,,	38	9	0
5 in.	,,	46	1	0
6 in.	,,	52	12	0
7 in.	,,	64	12	0
8 in.	,,	75	9	0
9 in.	,,	83	2	0
10 in.	,,	92	0	0
Filler Tiles in multiples of 10 tiles per 1,000 multiples :				
12 in. × 3 in. × ⅝ in.	,,	43	13	0
12 in. × 4 in. × ⅝ in.	,,	75	7	0
10 in. × 5 in. × ⅝ in.	,,	75	7	0

site buildings right away

Phone **WERNICKS**



LONDON: LANGHAM 4847/9
WOLVERHAMPTON: 25028/9
BILLERICAY: 1661/2

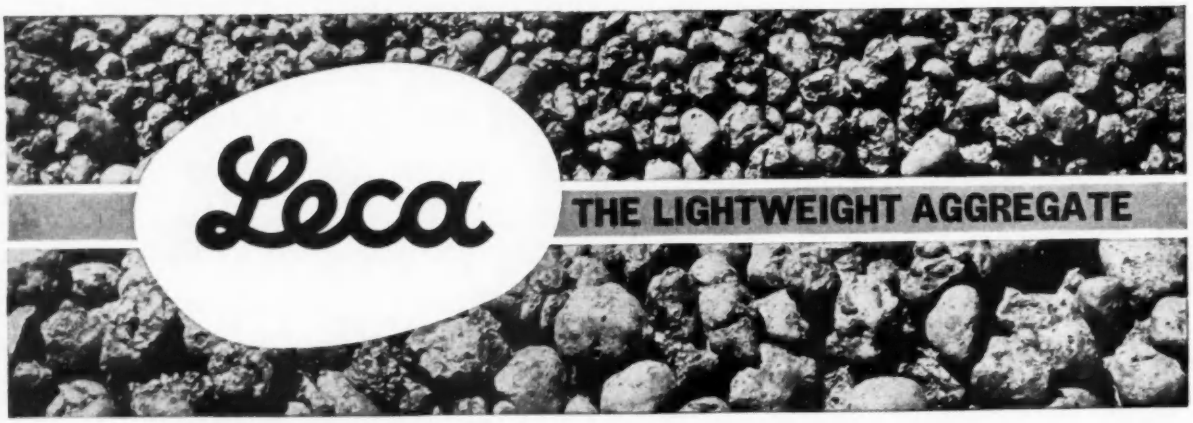
When site buildings are required urgently a telephone call to Wernicks will bring immediate delivery of the exact type of building you need. No fuss! No delay! Lowest prices!

Send for our superb new catalogue giving details of our complete range including Wheelbarrows, Ladders, Outdoor Sanitation Units, etc.

OR WRITE: **S. WERNICK & SONS LTD.**

64/66 Oxford St., W.I. or Dept. 94, Waterloo Rd., Wolverhampton or Dept. 94, 108 High St., Billericay, Essex

ANNOUNCING...



SPECIFY Leca NOW!

IN PRODUCTION AGAIN EARLY 1961

Leca (Great Britain) Ltd., Mill Lane, High Ongar, Essex. Tel: Ongar 2048

STONEWARE DRAIN PIPES, etc.

Glazed Stoneware Standard List (November, 1956).

		4 in.	6 in.	9 in.
Pipes, 2 ft. lengths	per ft.	1/8	2/6	4/6
Bends	each	5/-	7/6	20/3
Junctions	,,	8/4	12/6	27/-
Gullies with 4 in. outlets	,,	12/6	13/9	22/6

The following are the percentages to be added to the Standard List (November, 1956) prices delivered London Area.

Delivered ex Merchants Wharf or Depot.

	Over 2 tons	Over 100 pieces Under 2 tons	Under 100 pieces Under 2 tons
Best Quality	− 5%	+15%	+20%
BSS Best Quality ...	+10 % − 5%	+10 %+15%	+10 %+20 %
Tested Quality ...	+37½% − 5%	+37½%+15%	+37½%+20 %
BSS Tested Quality ...	+47½% − 5%	+47½%+15%	+47½%+20 %

		£	s.	d.
3 in. Land Drain Pipes (in 12 in. lengths)	per 1,000	12	10	6
4 in. do. do.	,,	16	16	0
6 in. do. do.	,,	34	10	0
9 in. do. do.	,,	64	19	0

DAMP COURSE

		£	s.	d.
Hessian base bitumen 7 lb. per yd. sup. in 24 ft. rolls cut to wall widths in lots of £6 value and over delivered London area	per yd. sup.		3	5
Asbestos base do. 7 lb. per yd. sup. do. do.	,,		5	2
Lead lined bitumen do. 9½ lb. per yd. sup. do. do.	,,		12	2
18 in. × 9 in. British damp course slates	per 1,000	43	8	11
14 in. × 9 in. do. do.	,,	32	8	2
9 in. × 9 in. do. do.	,,	18	18	9
18 in. × 4½ in. do. do.	,,	19	19	9
14 in. × 4½ in. do. do.	,,	15	18	3
9 in. × 4½ in. do. do.	,,	10	14	3

STONE

		£	s.	d.
Bath Stone				
Monks Park	per ft. cube		10	3
St. Aldhelm Box Ground	,,		11	6
Delivered in railway trucks at South Lambeth B.R. Western Region.				
Doulting Stone Random Blocks. Delivered London area	,,		10	10
Beer Stone. Delivered London area	,,		10	6
Portland Stone—				
Brown Whitbed in random blocks, 20 ft. average delivered in railway trucks at Nine Elms, B.R. Southern Region	,,		9	10
Yorkshire Stone—Blue Robin Hood Quality. Delivered to site London in 6-ton lots.				
9 in. × 3 in. Rubbed, weathered, throated and stolled cills	per ft. cube	4	5	10
2 in. × 6 in. do. do. do.	,,	3	1	2
12 in. × 3 in. Plain coping, twice throated	,,	2	7	6
2 in × 3 in. Weathered and twice throated coping	,,	3	3	3
4 in. × 6 in. do. do. do.	,,	2	17	0
4½ in. × 9 in. Plinth rubbed on top and face ...	,,	2	11	0
3 in. sawn two sides Slabs, random sizes	per ft. sup.		9	1
emplates and Cover Stones, 3 in., 4 in. and 6 in. thick, edges coped for rendered brickwork ...	per ft. cube	1	11	3
do. do. fair one edge for fair faced brickwork	,,	1	17	0
Hard York—				
12 in. × 2 in. Square Steps, rubbed on top and edge	per ft. run		11	0
14 in. × 3 in. Round-nosed Steps, rubbed on top and front	per ft. cube	2	18	3
12 in. × 6 in. Plain Steps, rubbed top and front	,,	2	11	0
2 in. Rubbed and Jointed Paving, given sizes ...	per ft. sup.		10	3
2 in. Sawn Paving, edges squared, in random sizes	per yd. sup.	3	12	0

TILES AND PANTILES

Delivered London area by road in 6 tons or over per 1,000.

	£	s.	d.
Machine-made Pantiles and French pattern Tiles from Lincolnshire district	35	16	6
Hand-made Pantiles Berkshire district	64	10	0
Hand-made Double Roman Bridgwater district	78	2	9
Hand-made 10½ × 6½ tiles Berkshire district	18	0	0
Machine-made 10½ × 6½ Staffordshire district	17	0	0
Hand-made Hip and Valley tiles per doz.	1	13	0
Machine-made Hip and Valley tiles do.	1	12	0
Concrete tiles 10½ × 6½	8	10	0
do. Interlocking (49S)	19	16	6

NOTE.—Breakage in transit, purchasers' responsibility.

SLATES

First-quality Slates from Penrhyn or Portmadoc, carriage paid in full truck loads to London Rate station. Per 1,000 actual.

	£	s.	d.
24 × 12	155	10	0
22 × 12	123	10	0
22 × 11	111	10	0
20 × 12	104	10	0
20 × 10	102	0	0
18 × 10	69	10	0
18 × 9	61	0	0
16 × 10	54	8	10
16 × 8	42	12	4

NOTE.—Breakage in transit, purchasers' responsibility.

TIMBER

			£	s.	d.
Softwood	Ex Wharf	per			
Joinery quality	do.	standard	£115 to £140		
Carcassing quality	do.	,,	£94 — £98		
1 in. Tongued and Grooved Flooring	do.	,,	£110	0	0
Hardwood			£	s.	d.
Mahogany—African S.E.	do.	per ft. cube	1	10	0
do. Honduras S.E.	do.	,,	3	5	0
Oak European S.E.	do.	,,	2	10	0
do. Japanese S.E.	do.	,,	3	0	0
do. English Logs sawn ...	do.	,,	2	0	0
Teak 8 in. average S.E. ...	do.	,,	3	17	6
Walnut African Logs sawn ...	do.	,,	1	2	6
Plywood		per			
6 mm. (¼ in.) Birch Plywood B/BB		100 sq. ft.	4	4	6
6 mm. Israeli Gaboon do. B/BB exterior grade WBP (AX100)		,,	4	5	3
18 mm. Birch Blockboard		,,	9	10	0
¾ in. Douglas Fir Plywood 96 in. × 48 in. Exterior grade WPB (AX100) solid two sides		,,	9	11	0

DOORS (in Lots I-II)

	£	s.	d.
Delivered London area.			
1½ in. 4 Horizontal Panel. Pattern 4 in. deal			
2 ft. 0 in. × 6 ft. 6 in. ... ... each	1	16	0
2 ft. 3 in. × 6 ft. 6 in. ... ... ,,	1	17	6
2 ft. 6 in. × 6 ft. 6 in. ... ... ,,	1	18	6
2 ft. 9 in. × 6 ft. 6 in. ... ... ,,	2	0	6
2 in. do. but top panel open. Pattern 4 × G in deal			
2 ft. 6 in. × 6 ft. 6 in. ... ... ,,	2	9	0
2 ft. 9 in. × 6 ft. 6 in. ... ... ,,	2	11	6
2 in. 2 Panel top panel open. Pattern 2 × G in deal			
2 ft. 6 in. × 6 ft. 6 in. ... ... ,,	2	3	0
2 ft. 9 in. × 6 ft. 6 in. ... ... ,,	2	5	0
1½ in. Plywood Faced Flush Doors to BS459, Part 2A			
2 ft. 0 in. × 6 ft. 0 in. ... ... ,,	1	12	3
2 ft. 0 in. × 6 ft. 6 in. ... ... ,,	1	12	3
2 ft. 3 in. × 6 ft. 6 in. ... ... ,,	1	13	9
2 ft. 6 in. × 6 ft. 6 in. ... ... ,,	1	15	3
2 ft. 9 in. × 6 ft. 6 in. ... ... ,,	1	18	0
1½ in. Hardboard Faced Flush Doors			
2 ft. 0 in. × 6 ft. 0 in. ... ... ,,	1	5	6
2 ft. 0 in. × 6 ft. 6 in. ... ... ,,	1	6	0
2 ft. 3 in. × 6 ft. 6 in. ... ... ,,	1	6	6
2 ft. 6 in. × 6 ft. 6 in. ... ... ,,	1	8	6
2 ft. 9 in. × 6 ft. 6 in. ... ... ,,	1	9	6

SUNDRIES

		£	s.	d.
Delivered London area.				
1 in. Wood Wool Slabs 6 ft. 0 in. × 2 ft. 0 in. in quantities of 1 ton (89 yds. to 1 ton)	per yd.		6	2
1½ in. do. (67 yds. to 1 ton)	,,		8	0
2 in. do. (52 yds. to 1 ton)	,,		9	9½
2½ in. do. (45 yds. to 1 ton)	,,		11	3
3 in. do. (39 yds. to 1 ton)	,,		12	7½
Quantities under 1 ton add 1d. per ½ in. of thickness				
½ in. imported or home produced insulation Board, quantities over 5,000 sq. ft.	per 100 sq. ft.	2	2	6
⅛ in. Hardboard do.	,,	1	17	6
5/16 in. do. do.	,,	2	4	6
2 in. Compressed Straw Slabs, roofing quality. 6 ft., 8 ft., 9 ft., 10 ft., and 12 ft. × 4 ft.				
50–100 yds.	per yd. sup.		11	4
101–250 yds.	,,		10	10
251–750 yds.	,,		10	1
Over 750 yds.	,,		9	4
2 in. do. for partitions 4d. per yd. cheaper.				
3/16 in. Asbestos Flat Building Sheets...	,,		4	3½
¼ in. do. do. do.	,,		6	0
Roofing Felt 1-ply	,,		1	9
do. 2-ply	,,		2	2½
Best Scotch Glue in slabs	per ½ cwt.	5	8	0
do. pearl	,,	5	8	0
Croid Glue	28 lb.	2	6	0
Impact Adhesive	per gall.	2	12	0
Cut Nails 3 in. (1-ton lots)	per ton	81	10	0
do. 4 in. and up (1-ton lots)	,,	78	0	0
Wire Nails 3 in. (4-cwt. lots)	per cwt.	3	19	2
do. 4 in. and up (4-cwt. lots)	,,	3	16	6

METALS

STEEL JOISTS, ETC.

		£	s.	d.
Basis Joists—				
6 in. × 5 in., 8 in. × 5 in., 8 in. × 6 in., 10 in. × 6 in. 12 in. × 6 in., plain cut to lengths delivered London area	per ton	47	15	0
Extra for sizes				
3 in. × 1½ in. 4 in. × 1¾ in.	,,	3	10	0
3 in. × 3 in.	,,	2	10	0
4 in. × 3 in.	,,	2	5	0
10 in. × 4½ in.	,,	1	10	0
5 in. × 2½ in. 5 in. × 3 in.	,,	1	15	0
4¾ in. × 1¾ in.	,,	3	5	0
5 in. × 4½ in. 7 in. × 3½ in. 13 in. × 5 in. ...	,,		15	0
6 in. × 3 in. 24 in. × 7½ in.	,,	2	0	0
6 in. × 4½ in. 7 in. × 4 in. 8 in. × 4 in. } 9 in. × 4 in. 10 in. × 5 in. ... ... }	,,	1	5	0
12 in. × 5 in. 22 in. × 7 in.	,,	1	0	0

METALS—*continued*

		£	s.	d.
9 in. × 7 in. / 10 in. × 8 in. / 12 in. × 8 in. / 14 in. × 5½ in. / 14 in. × 6 in. / 14 in. × 8 in. / 15 in. × 5 in. / 15 in. × 6 in. / 16 in. × 6 in.	per ton		10	0
16 in. × 8 in. / 18 in. × 6 in. / 18 in. × 7 in. / 18 in. × 8 in. / 20 in. × 6½ in. / 20 in. × 7½ in.	,,		10	0
Steel angles average price	,,	48	15	0
Steel tees average price	,,	49	15	0
Fabricated work delivered London—				
R.S. Joists cut and fitted...	,,	67	19	9
Compound girders...	,,	72	14	3
Stanchions	,,	78	9	9
Compound stanchions	,,	83	4	3
In Roof Work—Trusses and Purlins	,,	93	19	6
Average prices not for awkward work.				
Angle cleats and ⅝ in., ¾ in. and ⅞ in. bolts average price London area	per cwt.	5	10	0

Ferro-Concrete Bars and Fabric

		£	s.	d.
Mild Steel Ferro-Concrete Bars British manufacture to BSS 785 ex. Mills. 1 in. diameter and upwards delivered nearest London station ...	per ton	40	10	0
do. do. ex. London Stock do. delivered London site	,,	49	10	0
Extras—				
¼ in. diam....	per ton extra	8	12	6
5/16 in. do.	,,	6	12	6
⅜ in. do.	,,	4	12	6
⅞ in. do.	,,	3	2	6
⅝ in. do.	,,	1	10	0
⅛ in. and ¾ in. diam.	,,		15	0
Steel wire mesh reinforcing fabric to BSS 1221A.				
Ref. No. 106 ... ... 7.88 lbs.	per sq. yd.		5	1⅜
,, ,, 109 ... ... 4.71 ,, ...	,,		3	0½
,, ,, 113 ... ... 1.83 ,, ...	,,		1	8¼
,, ,, 122 ... ... 7.32 ,, ...	,,		4	9⅝
,, ,, 125 ... ... 4.32 ,, ...	,,		2	10

Mild Steel Tubes

Tubes to BSS 1387. Fittings BSS 1740.

Basic List Prices

		¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Tubes	per ft.	9¾	10	1/–	1/2½	1/9	2/3	2/8	2/9
Bends	each	1/7	1/9	2/–	2/6	3/8	5/5	6/2	10/7
Elbows, square	,,	1/8	1/10	2/2	2/6	3/–	4/4	5/2	8/6
do. round...	,,	1/10	2/–	2/4	2/10	3/4	4/8	5/8	9/4
Tees	,,	2/–	2/2	2/6	3/2	3/8	5/–	6/2	10/2
Crosses... ...	,,	4/4	4/8	5/6	6/6	8/2	11/–	13/2	21/–
Sockets, Plain	,,	6	6	8	10	1/–	1/4	1/9	2/6
do. Diminished	,,	8	10	1/–	1/2	1/6	2/–	2/8	4/–
Backnuts ...	,,	4	4	6	7	10	1/–	1/4	2/2

Malleable Fittings

		¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Elbows, round	each	8½	8½	9½	1/2½	1/8½	2/7½	3/6	5/–
Tees	,,	9½	9½	1/–	1/4¾	2/–	2/9½	4/–	5/6
Crosses... ...	,,	1/2½	1/2½	1/4¾	2/–	2/9½	3/7¼	5/2½	7/2½
Sockets... ...	,,	5¾	5¾	7	9¼	1/–	1/7¼	2/2½	3/1¼
Backnuts ...	,,	3	3	3¼	4¼	5¾	7¾	10¼	1/5¼

Discounts from List prices as follows :—

Galvanised Tube—	Under 1 ton	Over 1 ton	W.I. Fittings	Malleable Fittings
Light	−38½%	−40 %	Light −25½%	Malleable List
Medium	−34½%	−36 %	Heavy −21½%	−18¼% + 40%
Heavy	−26½%	−28¼%		
Black—				
Light	−49 %	−50¾%	Light −31½%	Malleable List
Medium	−45 %	−46¾%	Heavy −27¾%	−18¼%
Heavy	−37¼%	−39 %		

C.I. Half-Round Gutters

Delivered London per yd. in 6 ft. lengths.

	Gutters	Nozzles	Stop Ends
3 in.	4/2½	3/9	1/1
3½ in.	4/7	4/1	1/1
4 in.	5/11	4/7	1/7
4½ in.	6/6	5/1	1/11
5 in.	7/3	5/6	2/3

C.I.O.G. Gutters

Per yd. in 6-ft. lengths :	Gutters	Nozzles	Stop Ends
3 in.	5/5	4/11	1/3
3½ in.	6/–½	4/11	1/7
4 in.	6/8½	5/1	1/11
4½ in.	7/3	5/10	2/3
5 in.	7/11	6/8	2/7

C.I. Rain-Water Pipes

	Pipe	Bends	Branches
2 in.	8/11½	4/7	6/7
2½ in.	8/11½	5/1	8/10
3 in.	10/1	6/5	9/7
3½ in.	11/6	7/7	11/6
4 in.	13/3½	9/2	13/7

L.C.C. Coated Soil Pipes

2 in.	10/2½	7/10	9/7
2½ in.	10/9	8/9	11/11
3 in.	12/1	9/7	14/2
3½ in.	13/6	11/11	16/6
4 in.	15/4½	13/4	19/5

Above prices for gutters, rain-water and soil pipes for under 5-cwt. lots only. Lots over 5 cwt. see List No. 3300, dated February 1, 1955, plus 27½% and tonnage allowance. 4-ton lots 5%, 2-ton lots 2½%.

L.C.C. Coated Drain Pipes

		£	s.	d.
4 in. diameter in 9 ft. lengths	per yd. run	1	1	1
6 in. do. do.	,,	2	5	6
4 in. diameter bends	each		19	9
6 in. do. do.	,,	2	12	8
4 in. diameter branches	,,	1	15	1
6 in. do. do.	,,	4	4	2

above prices for any quantity but under 5 cwt. carriage extra.

Pitch Fibre Drain Pipes

2 in. diameter in 5 ft., 5 ft. 6 in. or 8 ft. lengths including couplings	per ft. run	1	6½
3 in. do.	,,	1	10½
4 in. do.	,,	2	6
5 in. do.	,,	4	1½
6 in. do.	,,	5	0½
4 in. diameter short radius ¼ bends	each	17	9
4 in. do. do. ⅛ bends	,,	12	11
2 in. diameter 6 ft. radius bends (5 ft. lengths)	,,	16	2
3 in. do. do. do.	,,	19	8
4 in. do. do. do.	,,	1 7	4
5 in. do. do. do.	,,	2 4	0
6 in. do. do. do.	,,	2 14	6

Above prices for loads of £60 and over.
Loads £25 to £59 19s. 11d. Plus 10%
Loads under £25 ... Plus 15%

Asbestos Rain-Water Pipes and Fittings

		2 in.	2½ in.	3 in.	4 in.
All less 17½% discount.					
Pipes, 6 ft. lengths	per yd.	4/7	4/10½	5/11	7/10
Shoes	each	3/–	3/3	3/10	5/2
Single Branches	,,	4/8	5/6	6/7	9/2
Bends, square or obtuse ...	,,	3/3	3/7	4/8	6/7
Swan Necks, 4½ in. proj. ...	,,	3/7	4/8	5/2	7/3
do. 6 in. do. ...	,,	3/10	5/2	5/10	7/10

Asbestos O.G. Gutters and Fittings

		4 in.	4½ in.	5 in.	6 in.
Gutters, 6 ft. lengths ...	per yd.	4/4	4/9½	5/9	6/10½
Drop ends	each	3/6	4/–	4/9	5/5
Stop ends	,,	1/1	1/2	1/3	1/5
Angles	,,	3/7	4/1	5/–	5/10
Nozzles	,,	3/6	4/–	4/9	5/–
Union Clips	,,	1/9	2/1	2/6	2/11

Asbestos Half-Round Gutters and Fittings

	per	3 in.	4 in.	4½ in.	5 in.	6 in.
Gutters, 6 ft. lengths	yd.	3/0½	3/7½	3/8½	4/4½	6/1
Drop ends	each	2/6	3/–	3/3	3/7	5/2
Stop ends	,,	1/–	1/1	1/2	1/3	1/5
Angles	,,	2/10	3/3	3/7	3/10	5/2
Nozzles	,,	2/6	3/–	3/3	3/7	5/2
Union Clips	,,	1/3	1/4	1/5	1/7	2/5

	Per ton basis in London £	s.	d.
Iron—Staffordshire Crown Merchant Quality	52	17	6
Mild Steel Bars	47	8	6
Mild Steel Hoops	49	0	0

	Ex Merchant's Stock per ton Two-ton lots £	s.	d.
Soft Sheets C.R. and C.A.—			
20 gauge	62	7	6
24 gauge	64	17	6
26 gauge	67	17	6
Galvanised Corrugated Sheets, 6 ft. to 9 ft.—			
20 gauge	70	18	0
24 gauge	74	8	0
26 gauge	79	13	0
Galvanised Flat Sheets C.R. and C.A.—			
20 gauge	72	8	0
24 gauge	75	18	0
26 gauge	81	3	0

ALUMINIUM AND ALUMINIUM ALLOYS

(Base Prices)		£	s.	d.
Sheet BS 1740 S1C 18 SWG (36 in. wide)... ...	per lb.		3	0½
Sheet BS 1470 NS3 Utility 18 SWG (36 in. wide)	,,		2	11½
Coiled strip BS 1470 S1C 18 SWG (24 in. wide)	,,		2	11½
Coiled strip BS 1470 NS3 Utility 18 SWG (24 in. wide)...	,,		2	11
Coiled strip high purity, 22 SWG (12 in. wide)	,,		3	2
Corrugated sheet BS 1470 NS3 Circular Profile 8 ft. × 32 in. × 20 SWG	per sheet	1	14	1
Corrugated sheet BS 1470 NS3 Industrial Profile 8 ft. × 31¾ in. × 20 SWG	,,	1	19	10
Corrugated sheet BS 1470 NS3 Mansard Profile 8 ft. × 31¾ in. × 20 SWG	,,	1	13	1
Extruded section BS 1476 E1C simple moulding	per lb.		2	10½
Extruded section BS 1476 E1C 1 in. diam. round	,,		2	8
Extruded section BS 1476 HE19WP simple angle	,,		3	2
Extruded section BS 1476 HE19WP 1 in. diam. round	,,		3	1
Tubing BS 1471 T1C 1½ in. O/D × 20 SWG ...	,,		4	8
Tubing BS 1471 HT19WP 1½ in. O/D × 20 SWG	,,		6	3

PLUMBERS' BRASS WORK, etc.

Delivered in London area.

All per dozen	B.S.S. ½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Screwdown bib cocks Crutch head for iron...	87/–	128/–	—	—	—	—
Toilet bib cocks for iron ...	109/–	158/5	—	—	—	—

The New Floating Screed

SYNTHANITE

WITH THESE BIG ADVANTAGES!

* Simple, speedy laying
* Does not depend upon adhesion to sub-floor
* 600 sq. yds. can safely be laid without expansion joints
* Dries and hardens quickly—ready for floor finish within 6-10 days
* Minimum shrinkage and cracking—greater stability and flexural strength
* Laid with waxed kraft paper or bitumen, making hacking or grouting unnecessary
* Permits the use of directly embedded cables for electrical underfloor heating
* Ideal for acoustic floating floors

Synthanite may be laid at 1¼" thickness over Acoustic Insulation and with its really smooth surface is ideal for plastic tiles, rubber, linoleum, wood blocks etc.

FOR DETAILED LITERATURE, WRITE TO:— **Semtex Ltd**

21 SEMTEX HOUSE · 19/20 BERNERS STREET · LONDON W.1 · Telephone: LANGHAM 0401

CDH 60/SE BS

CUT YOUR DOOR 'OVERHEADS'

with the

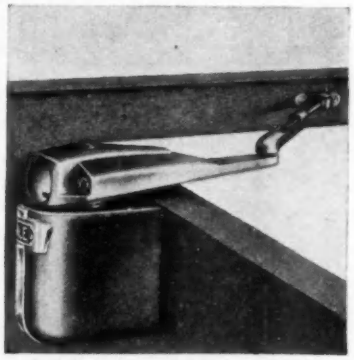
YALE 66

Door Closer

Here's an open and shut case for cutting door furniture costs—without any sacrifice of quality. The Yale No. 66 gives you both—in a supremely efficient door closer that's packed with exclusive features—Yale features that ensure versatility, economy and life-long dependability. The Yale 66 is easily adjusted to the required spring power, according to the weight, size and suspension of the door. *In seconds, it can be set to any one of four pre-determined positions, making it suitable for fitting to almost any type of door.* Invaluable for use in schools, hotels, and similar institutions.

The Coupling arm is quickly detachable from main arm, ensuring easy adjustment; Nylon Bush gives silent operation, self-lubrication.

Controlled Closing Speeds Two independent regulating valves are provided to control individually the initial and final closing speeds of the door.



Concealed Hold-Open Device is available as an optional extra, it is built-in to the closer, invisible when fitted. Holds door open at angle of 90°-100°.

OTHER EXCLUSIVE FEATURES OF THE YALE 66

- **Concealed fixing**
- **'O' Ring Seals to prevent oil leakage**
- **Fully reversible for both left-and right-hand doors**

LITERATURE. Write to your usual supplier for an illustrated leaflet, giving further details and specification of the Yale No. 66 Door Closer.

Where's there's a door–there's a need for

YALE
REGISTERED TRADE MARK

The YALE & TOWNE Manufacturing Company · Lock & Hardware Division · Dept. C3 · Willenhall · Staffs

PLUMBERS' BRASS WORK, etc.—*continued*

All per dozen	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Screwdown stop cocks for iron	66/-	95/9	188/-	363/-	522/6	917/6
do. with two unions for lead	89/-	132/-	234/4	472/-	623/6	1,389/6
Double nut boiler screws ...	18/8	26/5	47/6	48/6	67/-	93/6
Heavy Croydon ball valves ...	77/-	193/6	312/5	568/8	734/10	—
Plumbers' union brass lead to iron	19/6	23/6	38/6	52/10	70/6	165/-

	1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
Caps and Screws	33/-	40/8	59/6	92/5	118/10	155/3
Brass Sleeves	—	31/11	31/11	56/2	74/10	91/5

	1¼ × 6 lb.	1½ × 6 lb.	2 × 7 lb.	3 × 7 lb.
Lead P. trap with brass cleaning screws	68/6	85/6	137/-	233/9
Lead S. trap do. do.	82/9	102/9	168/3	302/3

Solder :			s.	d.
Plumbers' ...	1 cwt. lots	320/-	14 lb. lots per lb.	3 7
Tinmen's	,, ,,	404/-	,, ,, ,,	4 5
Blow pipe ...	,, ,,	407/-	,, ,, ,,	4 6

COPPER TUBES AND SHEETS

Copper tubes BSS 659/1944 on the basic price of 26½d. per lb. plus gauge and manufacturing extras as follows. Minimum quantities, 10 cwt.

	Extra d.		d.		d.
½ in. × 19 gauge	16½	Total per lb.	42¾	Approx. per ft.	11½
¾ in. × 19 ,,	14¾	,, ,,	40¼	,, ,,	16
1 in. × 18 ,,	12⅞	,, ,,	39¾	,, ,,	24½
1¼ in. × 18 ,,	12¼	,, ,,	38¾	,, ,,	29½
1½ in. × 18 ,,	12¼	,, ,,	38¾	,, ,,	35½
2 in. × 17 ,,	13¼	,, ,,	40¾	,, ,,	56½

Small Quantity extras :

10 cwts. to 5 cwts.	plus ½d. per lb.
5 cwts. to 2 cwts.	,, 1d. ,,
2 cwts. to 1 cwt.	,, 2d. ,,

	£	s.	d.
Rolled Copper sheets up to 48 in. wide, basic price plus gauge and manufacturing extras	260	0	0

ZINC

		£	s.	d.
Sheet Zinc, 10 gauge (25 SWG), 5 cwt. lots upwards	per cwt.	7	15	3
,, ,, 12 gauge (23 SWG), ,, ,, ,,	,,	7	14	9
,, ,, 14 gauge (21 SWG), ,, ,, ,,	,,	7	13	6

BRASS TUBE

Brass tubes, basic price, plus gauge and manufacturing extras	per lb.	1	10¼

LEAD SHEET AND PIPES

Basis selling price to one address in London or Home Counties :

		£	s.	d.
Lead Sheet, English, 3½ lb. substance and upwards	per ton	104	15	0
,, Water Pipe, in coils	,,	107	0	0
Lead Soil Pipe, 10 ft. or over 2 in. to 4 in. in dia.	,,	108	10	0
,, ,, ,, over 4 in. dia.	,,	110	10	0
,, Gas or Untinned Compo pipe...	,,	108	10	0

5 cwt. lots and over less 6d. per cwt. off basic prices.

Extras over Basis for quantities under 5 cwt. :			
3 cwt. and under 5 cwt.	per cwt.	4	0
1 cwt. do. 3 cwt.	,,	6	0

Smaller quantities than 1 cwt. priced specially.

Supplying sheet lead and lead pipes to less than basis weights and cutting to sizes less than basis charged extra according to current trade schedule.

Allowance for Old Lead, collected, £59 0s. 0d. per ton weighed at buyer's works.

PLASTER, etc.

		£	s.	d.
Coarse Pink in 1-ton loads and over delivered on site	per ton	8	8	3
do. White do. do. do.	,,	8	17	9
Sirapite Coarse BSS 1191 Class C do.	,,	8	19	9
do. Fine do. do. do.	,,	9	7	6
do. Browning BSS 1191 Class B do.	,,	8	19	9
do. Board Finish do. do.	,,	8	19	9
Blue Lias Lime, in 6-ton loads	,,	6	14	6
Hydrated Lime (Grey) in 6-ton loads	,,	5	10	0
do. (White) do.	,,	6	0	0
Lump Lime (Grey) do.	,,	5	7	0
do. (White) do.	,,	5	14	6
White Keen's or Parian Cement, in 1-ton loads ...	,,	12	4	9
Pink Keen's or Parian Cement, in 1-ton loads ...	,,	11	19	6
Granite Chips, in 6-ton loads	,,	2	5	3
Hair	per cwt.	4	17	6
Gypsum Plaster Lath or Base Board, ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	per yd.		2	2½
1,200 yds.	,,		2	1½
do. Insulating do. ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	,,		2	8
1,200 yds.	,,		2	7
Gypsum Plaster Wall Boards, 3 and 4 ft. wide 6 to 12 ft., ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	,,		2	5½
1,200 yds.	,,		2	4½
do. Insulating do. ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	,,		2	11
1,200 yds.	,,		2	10

PAINTS AND DISTEMPER

Delivered London area.		£	s.	d.
Ceiling Distemper	per cwt.	1	7	6
Washable Distemper	,,	5	15	0
Gloss Paint	per gal.	2	16	0
Super Snowcem cement paint (in 1 cwt. drums) ...	per cwt.	5	0	0

LEAD PRODUCTS AND OILS		£	s.	d.
Ground White Lead, in 1 cwt. kegs	per cwt.	8	7	6
Genuine White Lead Paint, 1-19 gal. lots in 1 gal. tins	per gal.	3	6	6
Genuine Red Lead, Dry, 1 cwt. keg (10 ton lots)	per cwt.	5	12	6
do. do. do. (1 cwt. lots)	,,	6	19	0
Genuine Linseed Oil Putty, 1 cwt. keg	,,	2	13	6
Size XD quality 28 lb.	per tin		9	0
Raw Linseed Oil (5 gal.) drums extra	per gal.		19	2
Boiled Linseed Oil (5 gal.) do.	,,	1	0	0
SUNDRIES				
Turpentine substitute (5 gal.) drums extra ...	,,		5	4½
do. do. (40 gal.) do.	,,		4	8½
Solignum, Brown (5 gal. cans) Exterior	,,		8	8
Creosote (40 gal. barrels)	,,		2	3
Paste Powder (1 lb. packets)	per lb.		2	4
White Lining Paper	per piece		1	2

VARNISHES, etc.

Delivered London area.		£	s.	d.
Oak Varnish, Outside or Inside	per gal.	2	0	0
Oak, Pale Copal do. do.	,,	2	0	0
Hard Drying Oak for Inside	,,	2	5	0
Crystal Paper Varnish do.	,,	2	8	0
Eggshell Flat Varnish do.	,,	2	2	0
Finest Carriage Varnish	,,	2	7	0
Front Door Varnish	,,	2	4	0
Japan Gold Size	,,	1	12	0
Black Japan	,,	1	16	0
Brunswick Black	,,	1	12	0
Berlin Black	,,	1	10	0
Terebene	,,	1	12	0
Knotting (1 gal. bottles free)	,,	1	15	0
French and Brush Polish (do.)...	,,	1	15	0

GLASS

Delivered London area.		s.	d.
18 oz. Sheet Glass Ordinary Glazing Quality— Cut Sizes...	per ft. sup.		10
24 oz. do. do. do. do.	,,	1	0½
26 oz. do. do. do. do.	,,	1	3
32 oz. do. do. do. do.	,,	1	7½
¼ in. Rolled Plate...	,,	1	3¾
3/16 in. Rolled and Rough Cast...	,,	1	6½
¼ in. do. do.	,,	1	7½
⅛ in. Figured Rolled and Cathedral, Standard patterns—			
White Group 1	,,	1	3¾
do. Group 2	,,	1	9¾
do. Standard Tints	,,	2	1½
do. Special Tints	,,	7	3
⅛ in. Pinstripe, Hammerstripe, Reeded, Reedlyte and Luminating Group 3	,,	1	8½
¼ in. Wired Cast	,,	1	10¾
¼ in. Georgian Wired Cast	,,	1	11
Hollow Glass Blocks—			
P.B.2 Cross reeded 5¾ × 5¾ × 3⅞ in.	each	3	9
P.B.3 Broad reeded 7¾ × 7¾ × 3⅞ in.	,,	5	9
P.B.32 Cross reeded 7¾ × 7¾ × 3⅞ in.	,,	5	9
P.B.4 Prismatic 7¾ × 7¾ × 3⅞ in.	,,	6	6
P.B.5 Flemish 7¾ × 7¾ × 3⅞ in.	,,	5	9
P.B.6 Boomerang 7¾ × 7¾ × 3⅞ in.	,,	6	6
Half Size Blocks—			
P.B.32 Cross reeded 7¾ × 3¾ × 3⅞ in.	,,	4	10
Radiused Corner Blocks to match up with—			
P.B.2 Cross reeded	,,	8	1
P.B.3 Broad reeded	,,	9	8
P.B.32 Cross reeded	,,	9	8
P.B.2, P.B.3, P.B.32 are also supplied in Light Diffusing Blocks at same price.			
¼ in. Polished Plate Glass, G.G. quality—			
In plates not exceeding 2 ft. sup.	per ft. sup.	4	7
,, ,, ,, 5 ft. sup.	,,	5	7
,, ,, ,, 45 ft. sup.	,,	7	6
,, ,, ,, 100 ft. sup.	,,	7	6
¼ in. Polished Plate, extra sizes, *i.e.*, plates exceeding 100 ft. sup. or 160 in. one way or 96 in. both ways. G.G. quality—Not exceeding 135 ft. sup. or 240 in. one way or 130 in. both ways ...	,,	11	4
Not exceeding 180 ft. sup. or do.	,,	15	0

Plates exceeding 180 ft. sup. prices on application.

Substances other than ¼ in. Polished Plate at Special Prices.

Quantity Tariff—Sheet and Sundry Glass.

The following prices apply to minimum quantities of one size and one pattern delivered by the manufacturer to one site at one time.

Description of Glass—	Minimum quantity	per ft. sup. s.	d.
18 oz. sheet O.Q.	3,000		7½
24 oz. ,, ,, ...	2,000		9½
26 oz. ,, ,, ...	2,000		11¾
32 oz. ,, ,, ...	2,000	1	3½
¼ in. Rolled Plate...	1,000		10⅞
⅛ in. Figured Rolled and Cathedral Standard Patterns, White Group 1	1,000		10⅞
do. Group 2	1,000	1	2¾
⅛ in. Pinstripe, Hammerstripe, Reeded, Luminating and Spotlyte Group 3	1,000	1	2¾
3/16 in. Rolled Plate or Rough Cast	2,000	1	2
¼ in. do. do.	2,000	1	2¾
¼ in. Wired Cast, Hexagonal	2,000	1	5
¼ in. Georgian Wired Cast	2,000	1	5½

THE BUILDER RATES OF WAGES

AS FROM FEBRUARY 6th., 1961. (Every endeavour is made to ensure accuracy but we cannot be responsible for errors)

1. Craftsmen and Labourers.

Region	Craftsmen	Labourers
	s. d.	s. d.
England & Wales (Grade A) ...	5 0	4 4½
London	5 1½	4 6
Liverpool and District ...	5 1½	4 6
Scotland... ...	5 0	4 4½

2. Apprentices.

Age	Per cent. of Craft Rate	London and Liverpool Dist.	England, Wales
		s. d.	s. d.
15	25	1 3½	1 3
16	33½	1 8½	1 8
17	50	2 6½	2 6
18	62½	3 2½	3 1½
19	75	3 10½	3 9
20	87½	4 6	4 4½

3. Young Male Labourers.

Age	Per cent. of Craft Rate	London and Liverpool Dist.	England, Wales and Scotland
		s. d.	s. d.
15	33½	1 6	1 5½
16	45	2 0½	1 11½
17	66½	3 0	2 11
18	100	4 6	4 4½

NORTHERN IRELAND is not included; rates fluctuate so much from district to district that reference should be made to local offices.
WATCHMEN.—The rates per shift for watchmen engaged on building sites is 27s. 6d. in London and Liverpool District, and 26s. 3d. in the provinces.
FEMALE OPERATIVES.—In all districts throughout the country except in Scotland the rate of wages for women, aged 19 and over, engaged in craft processes is 4s. 1½d. per hour. Women engaged on work other than craft processes, 3s. 9½d. per hour. In Scotland the rate for the woman craftsman is 4s. 4½d. after a probationary period, and the woman labourer, 3s. 10½d.

Fire Hazards in Building

FPA's Suggestions for Reducing Losses

BUILDING CONSTRUCTION and repairs are the source of a large number of fires every year. The chief fire hazards met with in building operations include blowlamps, oxy-acetylene equipment, bitumen, temporary heating and low-flash-point flammable liquids contained in adhesives (used for laying tiles), paint thinners and cleaning solvents. In addition to these there are the risks involved in temporary electrical installations and arrangements for heating, waste disposal and smoking. Many of these hazards are difficult to control. The isolation of hazardous processes by the usual fire-separation principles may be impracticable. Makeshift arrangements, often necessitated by clearing a space where the work is to be done, usually entail a disruption of normal working conditions and a state of disorder 'while the builders are in.' Extensions to buildings often mean that openings in an otherwise safe building are unprotected and fire and smoke are free to travel throughout the building.

In newly constructed buildings and buildings nearing completion, valuable equipment is often temporarily accumulated in one place, with no access left for fire-fighting purposes. Before a building is occupied automatic fire alarms are often not in operation, water supplies are not connected to automatic sprinklers or to hydrants, and, if the telephone is not in working order, there may be no means of calling the fire brigade. A fire in such circumstances could obviously prove disastrous. One newspaper firm lost almost half a million pounds in two fires of this nature before the buildings were even ready for use.

An article entitled 'Fire Precautions for Builders and Structural Engineers' published in the current issue of the Fire Protection Association's Bulletin, suggests that a higher degree of care could reduce the number of fires and lists precautions which should be taken for operations involving a fire risk. Among the precautions recommended are the giving of explicit instructions about the safe handling of their equipment to all personnel engaged in building operations, the exercise of care to ensure that flammable materials are kept at a safe distance from possible sources of ignition such as blowlamps and welding equipment and the special provision of fire extinguishing equipment to meet the risk involved in the building operation.

The article also recommends that where a blowlamp or oxy-acetylene welding or cutting equipment is to be used, a permit to work should be obtained beforehand from the person in charge who should first satisfy himself that the work cannot be carried out by other means. Rules should be drawn up establishing the conditions under which all hazardous operations may or may not be undertaken and managements should make themselves responsible for authorising the use of extra hazardous equipment on their premises.

Copies of the Bulletin may be obtained from the Secretary, Fire Protection Association, 31/45 Gresham-street, London, EC2. Price to non-members 1s. 6d.

New Companies

THE FOLLOWING NEW COMPANIES, registered in England, have been announced by Jordan and Sons, Ltd., company registration agents.

JUKES BUILDERS LTD.—Regd. Jan. 9, 1961. 439 Burton-rd., Gedling, Notts. Secy.: Ivy E. Jukes. Nom. cap.: £2,000.

A. & H. DARLINGTON LTD.—Regd. Jan. 9, 1961. 18 Moor-la., Kersal, Salford 7. Secy.: A. R. Darlington. Bldrs., etc. Nom. cap.: £10,000

J. WALSH (MORECAMBE) LTD.—Regd. Jan. 9, 1961. 9 Northumberland-st., Morecambe & Heysham. Secy.: Margaret Walsh. Bldrs., etc. Nom. cap.: £5,000.

F. A. WEBB & SON LTD.—Regd. Jan. 9, 1961. 315 Middlewood-rd., Sheffield. Secy.: Mrs. S. Webb. Bldrs., etc. Nom. cap.: £3,000.

L. G. FISK & SONS LTD.—Regd. Jan. 10, 1961. 11 Barbauld-rd., N16. Secy.: Rose Fisk. Bldrs., etc. Nom. cap.: £100.

BIRTLES (HOUSE BUILDERS) LTD.—Regd. Jan. 11, 1961. New West Point, 17 Aughton-la., Aston, Sheffield. Secy.: N. O. Birtles. Nom. cap.: £100.

D. J. SAUNDERS (CONTRACTORS) LTD.—Regd. Jan. 12, 1961. 6 Briar-ave., Hazel Grove, Stockport. Secy.: E. Donovan. Bldrs., etc. Nom. cap.: £100.

DUVAL CONSTRUCTION CO. LTD.—Regd. Jan. 12, 1961. 97 Forest-rd., E8. Secy.: Emma E. Overs. Bldrs., etc. Nom. cap.: £100.

GSC (CONTRACTORS) LTD.—Regd. Jan. 12, 1961. Bldrs., etc. Nom. cap.: £100. Sub.: V. J. Chown, 6-7 St. John-sq., Cardiff (solrs.).

JOHN COWELL & CO. (BOGNOR REGIS) LTD.—Regd. Jan. 12, 1961. 107 Felpham-rd., Felpham, Bognor Regis. Secy.: Mary B. Wren Bldrs., etc. Nom. cap.: £3,000.

FRANK BIRD (BUILDERS) LTD.—Regd. Jan. 13, 1961. Green Gables, Ripple, nr. Tewkesbury. Secy.: Nancy Bird. Nom. cap.: £5,000.

SOUTHWOOD BUILDINGS (SPELDHURST) LTD.—Regd. Jan. 13, 1961. 21 Barden-rd., Speldhurst, Kent. Secy.: Joan Plass. Mfrs. of portable and pre-fabricated bldgs., etc. Nom. cap.: £1,500.

T. J. LEGGETT LTD.—Regd. Jan. 16, 1961. Lloyds Bank-chmbrs., Basingstoke, Hants. Secy.: Catherine E. Leggett. Bldrs., contrs., etc. Nom. cap.: £1,000.

NELSON CONSTRUCTION CO. LTD.—Regd. Jan. 16, 1961. 186-188 George-la., E18. Secy.: G. G. Nelson. Bldrs., etc. Nom. cap.: £1,000

RONALD FISHER LTD.—Regd. Jan. 16, 1961. 'Willow Springs,' The Lane, West Mersea, Essex. Secy.: Emily Fisher. Bldrs., etc. Nom. cap.: £1,500.

J. C. BUXTON LTD.—Regd. Jan. 16, 1961. 4 Paper-bldgs., Temple, EC4. Secy.: C. G. Buxton. Bldrs., etc. Nom. cap.: £100.

PAGE & CULLING CO. LTD.—Regd. Jan. 16, 1961. Bldrs., etc. Nom. cap.: £100. Sub.: David J. Page, 9 Northcote-rd., NW10.

TYCON (BUILDERS) OF WHETSTONE LTD.—Regd. Jan. 17, 1961. 1392 High-rd., Whetstone, N20. Secy.: Anthony T. Young. Nom. cap.: £100.

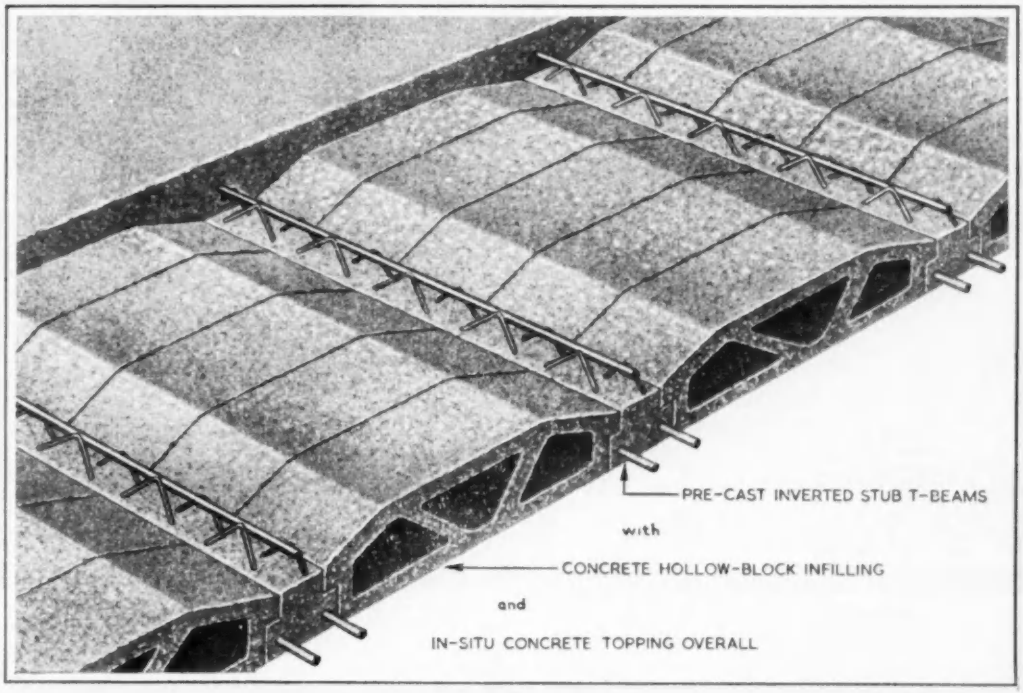
S. MCDONALD (BUILDERS & DECORATORS) LTD.—Regd. Jan. 17, 1961. 6 Theobald-st., Borehamwood, Herts. Secy.: Edwd. C. Osborn. Nom. cap.: £300.

RUSSELL BROTHERS (KENDAL) LTD.—Regd. Jan. 17, 1961. 22 Beast Banks, Kendal. Secy.: J. R. Russell. Bldrs., etc. Nom. cap.: £5,000.

ROBERT FISHER (BUILDERS) LTD.—Regd. Jan. 17, 1961. 483 Burnley-rd., Huncoat, nr. Accrington. Secy.: Elizabeth Fisher. Nom. cap.: £1,000.

THE TRIAD FLOOR

of light weight, simply and quickly erected, and combining the best features of in-situ and pre-cast concrete construction



ADVANTAGES:

1. No shuttering; minimum of temporary propping; ample room below for following trades.
2. The in-situ concrete topping ensures a more homogeneous slab than one composed solely of pre-cast units, better able to distribute imposed loading, and so avoiding the possibility of cracking in floor and ceiling finishes due to differential deflection in individual units.
3. A slight increase in the thickness of concrete topping provides for embedding conduits, etc., without the addition of a separate screeding for that specific purpose.
4. The uniform concrete soffit provides an ideal key for plaster.
5. If required, T-beams and hollow-blocks can be supplied for erection by the General Contractor.

Fully detailed literature forwarded on request: **THE KLEINE COMPANY LIMITED,**
9-13 GEORGE STREET, MANCHESTER SQUARE, LONDON, W.1 :: Telephone: Welbeck 9131

ASCOT AND THE PRIVATE BUILDER: 2

STOCKTON ROAD ESTATE

WEST HARTLEPOOL

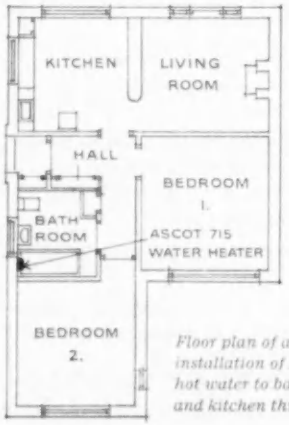
(30 semi-detached 2 and 3-bedroomed bungalows)

Builder: **Taylor and Evans, Ltd., 22 Elwick Road, West Hartlepool**

Architect: **T. A. Turnbull, Esq., L.R.I.B.A., 6 Scarborough Street, West Hartlepool**

Hot Water: **Ascot 715 multipoint instantaneous water heaters**

This is the second of a series of building case histories illustrating the installation of Ascot instantaneous gas water heaters in private enterprise housing. This example of private building at West Hartlepool shows how Ascot 715 " balanced flue " multipoint gas water heaters were used to provide a comprehensive instant hot water service for an estate of 30 semi-detached modern bungalows.



Floor plan of a bungalow showing installation of Ascot 715 to supply hot water to bath, bathroom basin and kitchen through existing taps.

1. *Two semi-detached 2-bedroom bungalows at Stockton Road.*
2. *Interior of a bathroom with an Ascot 715 within the 11" cavity wall over the bath.*

ASCOT

IS IDEAL FOR YOUR BUILDING SCHEME!

For full information write to
ASCOT GAS WATER HEATERS LIMITED
255 North Circular Road, LONDON, N.W.10

REGD. TRADE MARK ASCOT

A Radiation Company

WHG.A458

TECHNICAL REVIEW

This Review of plant, equipment and materials—in most cases new or with new features—is intended to give brief details only of the products mentioned. Notices are based on data supplied by the manufacturers. Additional information and prices can be obtained either direct or by using the prepaid Readers' Service form which appears on page 142 of this issue. The form can be used for more than one inquiry.

1. Communications

A small INTERNAL TELEPHONE SYSTEM available for a small outlay has recently been introduced. Its compactness owes much to the incorporation of the miniature uniselector, developed in conjunction with the GPO. The system operates from any AC mains supply, having its own power unit to convert to the 50 volts DC required for operation. As the system is a ten-line one, single-digit dialling from 0 to 9 caters for every extension. Dialling tone is provided. A priority button can be installed for selected telephone instruments to enable the user to override the ringing tone of a call dialled from elsewhere.

AEI Telecommunications Division, Siemens House, No. 3 Avon Trading Estate, London, W14.

2. Underfloor Heating

A new type of NYLON CARPET, specially designed for hotels, restaurants and offices with heated floors, was introduced at the British Carpet Fair on February 27. The carpet has been constructed with hessian backing, instead of the customary bonded foam rubber underlay, to allow the heat from the floor to penetrate the pile more effectively. Like all nylon carpeting it has a high safety factor, being incapable of flaming.

Alfred Morris Furnishing Ltd., 60 Berners-street, W1.

3. Panelling

New X-ray resistant DOORS, PARTITIONS AND WALL PANELS have recently been fitted in the radiography departments of Queen Mary's and Plaistow Hospitals in East London. They are made from lead Plymax, a composite material of sheet lead faced with plywood, and are the first of a series of similar installations to be made in all the six hospitals governed by the West Ham Group Hospital Management Committee.

Ministry of Health regulations regarding the shielding of X-ray installations, brought into force two years ago, require the room containing the source equipment to be isolated by a material that effectively blocks 'stray' radiation. Neither operating staff nor passers-by must be exposed to quantities of radiation that might, in the long run, be harmful. Plymax, because of its lead core, is claimed to provide an effective barrier to the rays whilst it also has the virtue of giving a pleasing exterior finish. The sheet lead is 1½mm. thick faced on both sides with, for the panelling, ¼ in. plywood and, for the doors, ¾ in. plywood.

Venesta Plywood Ltd., Vintry House, Queen Street-place, EC4.

4. Partitioning

A new type of MODULAR PARTITIONING, designed by Mr. Edward Samuel, MA, ARIBA, has recently been used in the head offices of Venesta Foils Ltd., at Thorn House. The framework of the partitioning is mahogany, the standard finish of the panels being plastic finished cloth, although formica, timber veneer or paint are adequate alternatives. The solid core doors are of veneered plywood with a plastic varnish. Either single or double glazing can be used.

The partitioning is easy to erect and take down and, particularly where double glazing is employed, there is a fair degree of sound insulation. Special consideration has been given to the incorporation of electric wiring systems so that no loose wires mar the finished effect.

Streatham Joinery Ltd., 91/93 Effra-road, London, SW2.

5. Heating

A large range of new oil-fired DOMESTIC HEATING EQUIPMENT has recently been introduced to the British market by a Midland firm of boiler and radiator manufacturers. The range includes two automatic electric ignition domestic vaporising boilers, four new pressure-jet units and a new light oil pressure-jet burner designed to convert solid fuel boilers ranging in size from 55,000 to 190,000 btus per hour.

Manufactured in two sizes—40,000 (Model E40) and 48,000 (Model E.50)—the electric ignition vaporising boilers are silent and odourless. Special attention has been paid to the design of the boiler cabinet. Both units are 36 in. high and 21 in. deep, so as to line up with standard kitchen units.

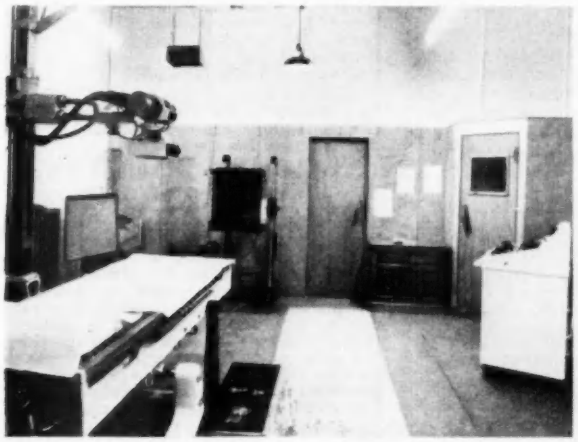
Operating on a different principle, the pressure jet-boiler burner units use a heavier oil which is drawn to the burner from a storage tank, forced through a fine nozzle and atomised. The units are suitable for larger homes with up to six or seven bedrooms to provide complete central heating and domestic hot water supplies. Instead of the water tube boiler used in previous models, the company have introduced a newly designed all-steel welded water section boiler of 5/16 in. boiler plate to give long life. Servicing is normally only necessary twice a year.

Henry Wilson & Co. Ltd., PO Box No. 6, Kirkby Industrial Estate, Liverpool.

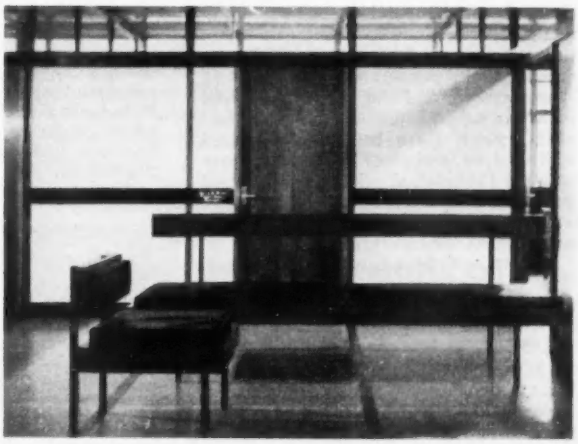
6. Household Fittings

A new SHOWER FITTING gives a choice of heights by the simple device of angling the shower arm at approximately three-quarters of its length. When the longer, straight section is connected to the riser pipe an overhead shower can be obtained, whilst for a shoulder height position the arm is reversed. The shower head is movable, being equipped with a standard ball-swivel joint, and the shower rose is easy to clean. Both the pipe and arm are in a very heavy gauge copper which would make it suitable for heavy duty use.

Walker, Crosweller & Co., Ltd., Cheltenham, Gloucester.



An installation at Queen Mary's Hospital, Stratford, where lead Plymax is used



A section of the modular partitioning used at Thorn House, London, WC2

Direct Labour, Lincoln

Councillor on 'A Discreditable State of Affairs'

FROM OUR CORRESPONDENT

AN ATTACK on the final accounts of two of the direct labour department's contracts was made at the meeting on February 21 of Lincoln City Council by CLLR. F. R. ECCLESHARE. Cllr. Eccleshare, who is a director of a local building firm, had obtained special dispensation from the Minister of Housing and Local Government to speak.

After detailing the history of these contracts (in one of which, he said, a substantial underspending was shown by the means of squeezing a high original price past the Minister; and in the second a loss of over £37 per house built was realised, the Minister having refused to sanction the contract unless it could be shown that the estimate was based on competitive figures) Cllr. Eccleshare said: 'I am not prepared to remain a member of this council without exposing a state of affairs which I believe to be utterly discreditable.'

How Direct Labour Does the Sum

During his speech, Cllr. Eccleshare disclosed the basis in Lincoln on which Direct Labour and private contractors, he said, tender in competition for fixed-price contracts.

The first step is that bills of quantities are prepared for the Council by an outside firm of quantity surveyors. The contract is then advertised inviting tenders on a fixed price basis, subject to all the normal conditions relating to such contracts.

The Direct Labour department submits an estimate, and this is considered along with other tenders, the contract being awarded to the lowest tenderer. If this should be a private contractor, a quantity surveyor measures the work in the usual way, certifies interim payments, etc., and ultimately produces the final account, as is normal practice.

If, however, the Direct Labour department price is accepted, then (according to Cllr. Eccleshare) the services of the quantity surveyor are dispensed with, no clerk of works supervises, and the architect's department, who employ no quantity surveyor, produce their final own account. No measurement of the work is undertaken, and the cost is compared with the original price, less adjustment of PC sums, there being no measured additions or omissions. The difference between the original price and the actual cost, less adjustment of PC sums, is then considered to be a saving or an overspending, as the case may be.

Having secured a contract in competition, the Department is then permitted to negotiate two further contracts without competition.

Concluding his speech, Cllr. Eccleshare said that over a period of seven years which he had analysed, claims for increased costs and overspending paid to the Direct Labour department had exceeded claims made by private contractors, based on exactly the same number of houses, by almost £30,000. 'Those who have the best interests of the council at heart,' he said, 'should be ready and willing to have all accounts certified by an independent quantity surveyor in the proper manner.'

Replying to the speech, CLLR. G. G. ELSEY, chairman of the housing committee, declared: 'I am satisfied there is nothing awry with the direct labour department. I am not prepared to have quantity surveyors, nor to have an investigation in which the City Architect's professional abilities would be challenged. He is responsible to the Ministry and to the ratepayers in the end.'

News in Brief

House Prices Still Rising

THE Co-operative Permanent Building Society's latest Occasional Bulletin shows that the rising trend of house prices continues. In the last quarter of 1960 prices of existing houses mortgaged to the Society were, on average, 9 per cent higher than in the last quarter of 1959. The prices of houses costing over £2,500 (London £3,000) rose by about 13 per cent during the year; houses costing under £1,500 (London £2,000) rose by 3½ per cent; and those in the middle range by 6 per cent in the same period. 'The outstanding feature of the property market during 1960 was undoubtedly the marked rise in house prices in the London area and in the Home Counties,' declares the Bulletin. 'The average selling price of properties mortgaged to the Society in the London region rose by about 16 per cent over the year.' With regard to new houses the Bulletin reports that average selling prices rose by almost 7 per cent during the year.

Headmasters at Brixton

A MEETING of headmasters and career masters of secondary schools, representatives of the building industry, and members of the teaching staff of the Brixton School of Building, will be held on March 13. Discussion will largely be devoted to the recommendations of the pamphlet, 'Building Studies in Secondary Schools,' recently published by the London County Council and circulated for consideration by teachers. Further details may be obtained from the Secretary of the Brixton School, Ferndale-road.

Safety Precautions Course

'ACCIDENTS associated with building operations are caused and need not happen.' This is the theme of a course of eight weekly lectures to be given at Tottenham Technical College, High-road, Tottenham, commencing at 7 p.m. on March 9. The fee for attendance is £1 for the complete course. It is hoped as many as possible will take advantage of this method of applying, in broad terms, the requirements of the Building (Safety, Health and Welfare) Regulations, 1948. Inquiries regarding the course may be made to the Head of the Department of Technology. Enrolment by March 7.

Spoutcrag

(LANGDALE PIKES)

Light Sea Green Slate

125,000 sq. ft. used for cladding the Commonwealth's Tallest Building – 600 ft. high –

The Canadian Bank of Commerce, Montreal.

Chosen for its beautiful and unique bar markings, colour and ability to withstand temperatures experienced in Eastern Canada ranging from the arctic to the tropical.

Samples and technical details on request to:

Broughton Moor

GREEN SLATE QUARRIES LTD

CONISTON · LANCS · TEL. 225/6

Personal Column

MR. B. S. ROGERS, AIOB, has been appointed a director of Holland & Hannen and Cubitts (Great Britain) Ltd. Since 1956 Mr. Rogers has been in charge of the General Works Department.

MR. E. S. EVERITT has joined the board of Ruston & Hornsby (Australia) Pty. Ltd. Mr. Everitt is managing director of Ruston-Bucyrus Ltd. and a director of Bucyrus-Erie Company of South Milwaukee, USA.

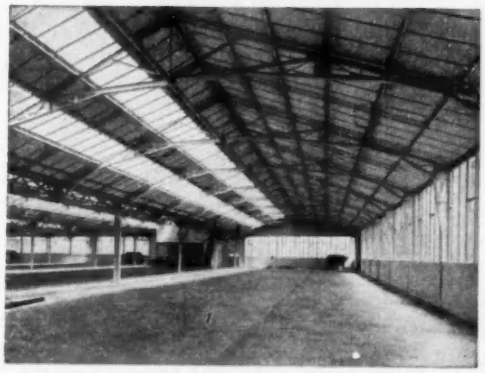
Sanders & Forster Ltd., structural engineering company of the Chamberlain Group of Companies, have appointed MR. ALEC. F. GIBB sales manager for Canada.

Company News

Negotiations are proceeding between JOHN MCLEAN & SONS LTD., of Wolverhampton and JOSEPH WEBB & CO. LTD., of Coseley, with a view to finding a basis for possible merger of the two companies. Both companies are actively engaged in the building of private houses, flats and shops, and in addition Joseph Webb are developing industrial sites. The main reason for the proposed merger is that the two Boards feel that the two companies are complementary and that together they could proceed to further expansion.

BLUNDELL, SPENCE & CO. LTD. recommend the payment of a final dividend of 12 per cent (less tax) on £1,223,850 stock for the year ended October 31, 1960.

TEMPLEX LIGHT STEEL FACTORY BUILDINGS



★ INDIVIDUAL DESIGNS AT LOW COST AND SUBSEQUENT UPKEEP

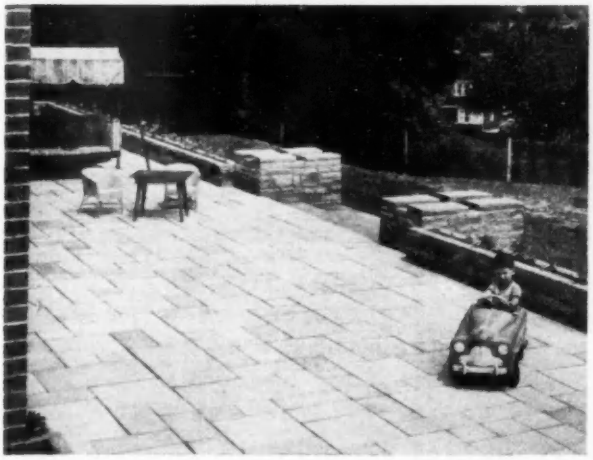
★ ROBUST PATENTED CONSTRUCTION ALLOWING LARGE WORKING AREAS

★ INSULATION OF THE HIGHEST DEGREE FOR WINTER AND SUMMER YET GIVING MAXIMUM DAYLIGHT CONDITIONS

★ ATTRACTIVE APPEARANCE INSIDE AND OUT

SEND FOR ILLUSTRATED TECHNICAL BROCHURE

TEMPLEX HOLDINGS
STEEL CONSTRUCTION COMPANY LTD.
110 KINGS ROAD · SLOANE SQUARE · LONDON, S.W.3
Kensington 2539 & 2628
STEEL FABRICATING WORKS:
CUTHBERT STREET, ST. HELENS ROAD, BOLTON, LANCS. Bolton 1436 & 5579



Everyone loves a Terrace!

In fact, a terrace *makes* a property; and in the word 'Terrace' is included every kind of garden construction—drives, walls, copings, surrounds and paths. Marlite is a very 'natural' man-made paving imparting distinction, even to a site which might otherwise be insignificant. It is easy to lay, uniform in size and colour, non-slip and economical. The five mellow colours in a wide range of sizes—12 in all—give the architect almost unlimited scope.

MARLITE PAVING

***MARLEY CONCRETE LIMITED* Dept. T2/15**

Peasmarsh, Guildford, Surrey. (Head Office) *Guildford 69171*
Shurdington, Cheltenham, Glos. *Shurdington 334/5*
Waterloo, Poole, Dorset *Broadstone 911/2*
London Show Rooms: 251 Tottenham Court Road, W.1.

QUALITY IS THE CLAIM

LINER

'Roughrider' REGD.

15 or 22½ cwt. DIESEL DUMPER

The dumper that brilliant engineering produced for you!

You may pay more for the Roughrider than for other dumpers, but nowhere will you get the staying power, the high quality of materials and design that Liner have built into this splendid machine. Proof is in the low maintenance costs (annual average is only £3/10/-) and in the years of staunch service your Roughrider will give you.

CONSIDER THE ADVANTAGES

1 Propeller shaft not needing lubrication.
2 P.R.M. constant mesh change-on-move gear box with three forward and reverse speeds.
3 Small turning circle makes it the ideal machine for narrow roads.
4 All-in-line transmission without belts or chains.
5 Height of skip gives easy loading from the mixer.
6 Low centre of gravity enables the Roughrider to operate under extremely adverse conditions.
7 Guards protect driver and working parts.
8 Fully floating rear axle.
9 Patented two-position skip.

HIRE PURCHASE TERMS ONLY 10% DEPOSIT

THE LINER CONCRETE MACHINERY CO. LTD.

280, PARK ROAD, GATESHEAD, 8. *Phone: 72501 Grams: 'Liner, Gateshead'*
London Office: Liner House, Lexden Road, Acton, W.3. Tel: ACOrn 8931

Please send full details of the Liner 'Roughrider'

NAME .....

ADDRESS .....

.....

280

Thermo-Fax "*Secretary*" copying machines produce copies from an original the perfectly dry way! Only electric one-step copying will produce an itemised account statement or 39 addressed and gum-perforated labels in just four seconds!

The Thermo-Fax 'Secretary' copier will save you money - cut costs on office overhead. The 'Secretary' copier speeds the flow of office paperwork in numerous ways. More information? Mail the coupon below.

Thermo-Fax PRODUCT OF 3M COMPANY RESEARCH

for Better Business Communications

FREE ***Show me 'Ways to Speed Paper Flow' in my company***

Name ..... Position .....

Company .....

Address .....

.....

POST TO MINNESOTA MINING & MANUFACTURING CO. LTD., 3M HOUSE, WIGMORE STREET, LONDON, W.1 (B.I.)

OVERSEAS BUILDING

From Our Own Correspondents

ARGENTINA.—The Ministerio de Economía y Obras Públicas of the province of Santa Cruz has issued public tender No. 15/60 for the study, draft plans, construction, and financing of a gas pipeline 160 Km. in length from Pico Truncado to Puerto Deseado, a dam across the River Deseado, and a 40-Km. waterpipe. The closing date is March 17. Details are obtainable from the Ministry at Avenidax Róca 690 Rio Gallegos, Provincia de Santa Cruz, Argentina.

AUSTRALIA (QUEENSLAND).—A new oil refinery to cost £A18m. is to be built by the Ampol Petroleum Co., at Port Alma, near Rockhampton. Another refinery is to be built by an Australian subsidiary of the Standard Oil Co., near the mouth of the Brisbane River.

AUSTRALIA (SOUTH).—The construction of a large dam has been referred to the River Murray Commission for early examination and report. The site recommended for the dam is 12 miles from South Australia's border with New South Wales and Victoria. The estimated cost is £A14m. The object is to store the water which now runs to waste into the sea and to divert it for irrigation and domestic use.

AUSTRALIA (VICTORIA).—An Australian cultural centre is to be built at Melbourne at a cost of £A4m. The centre will provide for all the arts and consist of three connected buildings topped by a 415-ft. gold-tipped spire, and surrounded by gardens, terraces, fountains and what is to be known as a 'pool of reflection.' One of the three large courtyards will accommodate 1,000 people on surrounding balconies and will be used for the traditional presentation of Shakespearean plays. There will be three theatres below ground level. Construction work is expected to start later this year and will be completed by 1964. The architect is Mr. Ray B. Grounds, of Grounds, Romberg and Boyd, of Melbourne.

BRAZIL.—A meeting of the joint Brazil-Ecuador Mission agreed recently to recommend to their respective Governments the building of a highway Quito-Putumayo (on the river Putumayo), thus completing the land-river link between the free ports of San Lorenzo, on the Pacific coast, and Manaus, on the Amazon.

CANADA (ALBERTA).—Reconsideration is being given to the construction of a civic centre on the site that surrounds Edmonton's $3.5m. new city hall. . . . The Edmonton Exhibition Association has announced plans for building a $2.5m. sports building. Completion is scheduled for 1962. . . .The Shell Oil Co. is seeking permission to construct a $20m. gas processing plant at Waterton gas field. . . . Home Oil and Associates are asking permission to construct a $4.3m. addition to their plant at the Carstairs gas field.

CANADA (BRITISH COLUMBIA).—Tenders have been invited for a $3.5m. addition to the Nanaimo Regional General Hospital.

CANADA (NEWFOUNDLAND).—The City of St. John's has announced construction plans for a 500-acre housing development. . . . The Federal Government has provided $13m. for the reconstruction of St. John's harbour. . . . Newfoundland Paper and Pulp Mills is to finance the construction of a 130-student residence for Memorial University. . . . A 100-house township is to be constructed at Baie Verte in connection with the $20m. development programme of the Johns-Mansville Co. on an asbestos ore body.

CANADA (ONTARIO).—$10m. is to be spent at Lakehead on the construction of five new grain storage terminals. Included in the programme is a 4.5m.-bushel granary for Manitoba Pools Ltd. . . . The City of Ottawa is planning a $1m. shopping mall on Rideau-street. . . . The National Proprietary Corporation is planning a $21m. construction programme in Oshawa. . . . An announcement has been made for the construction of a $1m. winery by Andrew Peller of Hamilton.

DOMINICAN REPUBLIC. — Work has started on a 42-room hotel at the religious centre and new town of Higuey. The hotel, which will have a private bathroom for every room and a spacious patio to accommodate 400, will cost £¼m. The development of coach touring facilities for both internal and overseas visitors will necessitate the provision of additional hotel accommodation in several areas. Contractors for the hotel are Espaillat and Espaillat.

IRAQ.—A £5½m. contract for a hospital at Baghdad has been awarded to a consortium of Glasgow firms, Messrs. Keir and Cawder and A. A. Stuart and Sons (Glasgow). Staff from foremen upwards will be drawn from the United Kingdom and the contract will take four years to complete.

ISRAEL.—Two British firms—B. S. Massey, the Manchester equipment firm, and Forgings and Presswork Ltd., of Birmingham—are joining with the Israel Government in establishing a I£3½m. iron forging plant, the cornerstone for which has been laid near Haifa.

UNION OF SOUTH AFRICA.—Barclays Bank DCO reports that building plans passed in the 18 principal urban areas of the Union (excluding particulars for local authorities and the National Housing and Planning Commission) during the year 1960 reflects an increase of some 1.4m. Rands (One Rand = 10s.) over the 1959 figure of R123m. The main movements by comparison with 1959 were a growth of R3.7m. in plans for manufacturing and other non-residential buildings, offset by a decrease of R3.2m. in plans for flats and other dwellings (excluding houses). Proposed building work in all other categories was roughly on a par in 1960 with the figures of a year earlier, although home-building plans and alterations or additions to existing buildings between them accounted for an increase of roughly R1m. in the latest period. The Bank adds that, plans passed in December, 1960, at R7.6m. totalled R1.2m. less than those for November, and were well below the December, 1959, level.

UNION OF SOUTH AFRICA.—The Government has decided to build a large luxury hotel at the Jan Smuts Airport, the main object being to provide accommodation for delegates to international conferences. A further building to contain conference halls and committee rooms will be erected adjacent to the hotel. To ensure that the hotel and congress buildings comply with up-to-date techniques an architect is to be sent overseas to study the latest developments.

ERNIE
BAYLISS
LIMITED
DECORATORS
Specialists in Brush and Spray Painting
APPROVED CONTRACTORS TO:—
M.O.W., AIR MINISTRY, L.C.C.,
WAR DEPARTMENT, L.T.E.,
LOCAL AUTHORITIES, ETC.
ST. STEPHENS HOUSE,
Westminster, S.W.1
Telephone: WHItehall 3704/2592

Russian Young Builders' Conference

A NATIONAL CONFERENCE of young builders will take place in the Kremlin at Moscow from March 9 to 11, according to an announcement by the central committee of the CPSU and the USSR Council of Ministers. The conference will discuss the tasks facing young builders in speeding up the construction of principal undertakings and the fulfilment of the 7-Year Plan ahead of time.

British Export Drive, E. Germany

APPROXIMATELY 225 British firms will exhibit at the 1961 Leipzig Spring Fair from March 5-14. At the Technical Fair the British Pavilian, co-ordinated by British Overseas Fairs Ltd., will contain 58 exhibitors. Another 140 exhibitors will be in other pavilions making a total of 198 firms exhibiting. A further 27 will be at the Samples Fair. Mr. John Maitland is supervising the design and organisation of the British Pavilion.

SCOTTISH BUILDER

Civil Engineering and the Community

'THERE ARE two ways in which the civil engineering industry could do more with benefit to the community,' said MR. W. G. MITCHELL, CBE, President of the Federation of Civil Engineering Contractors, speaking at the annual dinner of the Federation's Scottish Section in Glasgow on February 28. 'First, there is need for a much greater drive in construction works for services such as road improvements, water, sewerage and flood prevention. There is a tendency for these works to get out of balance with industrial and commercial development, which, if not tackled soon, will cause overloading and possible breakdown of these services. The industry has spare capacity for such work.

'Second, contractors should be given an opportunity to compete for works now carried out by direct labour organisations without competition. A virile competitive civil engineering industry at home is an essential base from which to advance to works overseas.'

Brick Shortage at Glenrothes

THE development of about 300 houses in the Rimbleton area of Glenrothes, Fife, is being held up. An acute shortage of a special facing brick used has caused some unemployment and there is also difficulties with some other essential construction materials. The Scottish headquarters of the National Federation of Building Trade Operatives are to be asked to lodge a strong protest with Glenrothes Development Corporation against their 'repeated failure to preserve continuity of work between one building site and another.' Glenrothes Development Corporation has authorised the contractor concerned to purchase the required facing bricks from an Ayrshire company at a higher price to get the work underway again.

New Buildings

AYR.—Agreement in principle was reached for the construction of swimming baths and a move is being made to spur on the acquisition of Churchill Barracks for further seafront schemes. The swimming baths are to be erected at a cost not exceeding £200,000. . . . The Corporation's Water Com. have agreed to make an approach to the Department of Health for Scotland for borrowing sanction for the required extension of the water filters at Knockjarder. Six new filter beds at an estimated £100,000 are required.

GLASGOW.—Dean of Guild Court has approved an £800,000 extension to the BBC building in Queen Margaret-dr., Glasgow. More than doubling the area of the present building, the extension will include a TV studio and will be built on an adjoining site, formerly a bowling green. . . . Dean of Guild Court has approved plans for the first stage of the 17-storey shops and office development by the West Nile Investment Co., on the site of the former Lyric Theatre in Sauchiehall-st., Glasgow. . . . Five new centres being provided by Glasgow YMCA in housing schemes in the city are likely to be completed by September. They are sited at Castlemilk (two), Springboig, Easterhouse and Drumchapel. Est. cost of the five buildings is £65,000.

GLASGOW.—The possibility of building houses in 27-storey blocks in Garscadden House Policies is to be examined by the housing committee of the Corpn. The highest flats proposed so far for Glasgow—and Scotland—are at the Wyndford housing scheme which is to replace Maryhill Barracks. They are to be 26 storeys and 230 ft. high. . . . An industrial estate is planned on the site of the former ironworks of William Dixon & Co. (Dixon's Blazes) on the south side of Glasgow between Gorbals and Govanhill.

KIRKWALL.—TC has approved a £75,000 water scheme, designed to supply Kirkwall with a total of 400,000 gals./day. Over half of the sum involved will be spent on a filtration plant. Preliminary and survey work have been going on for some time. The original reservoir at Wideford Hill, holding 22.9m. gall., has been insufficient for the Burgh's requirements for nearly 30 years.

LOCH TURRET WATER BD.—Construction of reservoir works at Loch Turret, nr. Crieff. Experienced contractors available to ensure completion within 30 months are invited to submit names to Messrs. Babtie Shaw & Morton, 17 Blythswood-sq., Glasgow, C2, or 19 Grosvenor-pl., London, SW1.

PAISLEY.—Dean of Guild Court has approved a £15,000 new laboratory and pilot plant for Brown & Polson Ltd., Paisley. The new laboratory will be an extensive single-storey building and will be erected opposite the firm's existing premises in Falside-rd.

RENFREW CC.—Erection of Maukinhill prim. sch., Greenock. Usual trades. County C, County-bldgs., Paisley.

WEST LOTHIAN.—Building projects approved by West Lothian Education Com. recently will cost £1,145,000. They include a technical college and a new senior comprehensive school at Bathgate.

THE BUILDER CONSTRUCTION NEWS

Full details of Public Appointments open will be found in the Advertisement pages of this and previous issues.

CONTRACTS OPEN

For some contracts still open but not included in this list, see previous issues. Those preceded by the symbol (A) are advertised in this number. The latest date for the receipt of tenders or applications appears above each paragraph. The symbol (R) preceding each entry indicates that applications must be received by this date.

BUILDING

MARCH 8

(AR) LINDSAY CC.—Erection of stage three of the Tattersall Gartree sec. sch., Conningsby, Lincs. Clarke, Hall, Scorer & Bright, architects, 200 High-st., Lincoln. Tenders by April 5.

(AR) NEWCASTLE-UNDER-LYME BC.—Fixed price tenders for 12 shops with flats and maisonettes over. Boro' S. Dep. £2.

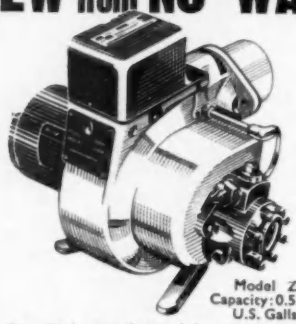
MARCH 9

(AR) SURREY CC.—Erection of new county prim. sch. at Bell-la., Fetcham, Leatherhead. County A.

MARCH 10

NORTHERN IRELAND HOUSING TRUST.—External painting of 255 dwellings, 6 shops, 4 flats, estate office and 8 garages, at Andersonstown (dev. 1). Offices of the Trust, 12 Hope-st., Belfast.

NEW from NU-WAY



Model ZL2
Capacity: 0.5 to 2.5 U.S. Galls/hr.

ZL2 The Oil burner designed for today's Domestic Heating Market.
ZL2 Approved and fitted by the leading boiler and airheater manufacturers.
ZL2 For the efficient conversion of existing boilers to Nu-way oil firing.

Write:
NU-WAY HEATING PLANTS LTD.
(Box. B417) DROITWICH.

MARCH 11

(AR) CAMBRIDGE CITY C.—Fixed price tenders for 59 houses at Arbury-rd. estate (North). City S. Dep. £2 2s. Tenders by April 10.

(AR) ESSEX CC.—Additional classrooms and adaptations at Sir Anthony Deane county sec. sch., Harwich. County A.

MARCH 13

(AR) BRISTOL CITY C.—Fixed price tenders for demolition of existing brick built premises at 18 Queen-sq. and rebuilding in the same Georgian style but with r.c. floors, to provide office accommodation. City A.

(AR) PORTSMOUTH CITY C.—Alterations and improvements for aged persons' home at St. Mary's House. Clayton, Black & Petch, 25 Landport-terr., Portsmouth. Dep. £1.

(AR) WEST SUSSEX CC.—Fixed price tenders for a single-bay fire station at Partridge Green. County A.

MARCH 14

HILLSBOROUGH RDC.—Fixed price tenders for 16 houses at Dromara, Co. Down, and 14 houses at Ravarnet, Co. Down. William B. Maxwell, chartered architect, 5 University-ter., Belfast, 7. Dep. £10 10s.

(AR) LITTLEHAMPTON UDC.—Erection of pavilion. E&S. Dep. £3 3s. Tenders by April 25.

(AR) PENZANCE BC. — Erection of information bureau. Boro' E&S.

MARCH 15

(AR) WEST SUSSEX CC.—Fixed price tenders for extensions and modifications to Camelsdale prim. sch., nr. Haslemere. County A.

MARCH 17

CLOGHER RDC.—Erection of Council offices at Crossowen, Clogher, Co. Tyrone. E. C. Harris & Partners, 171 Crumlin-rd., Belfast 14. Dep. £5 5s.

(A) KIDDERMINSTER BC.—Fixed price tenders for 30 dwellings, etc., at Habberley. Boro' E&S. Dep. £2.

(AR) PORTSMOUTH CITY C.—Modernisation of Horndean House (19 flats) at Landport. Director of Housing. Dep. £1.

MARCH 18

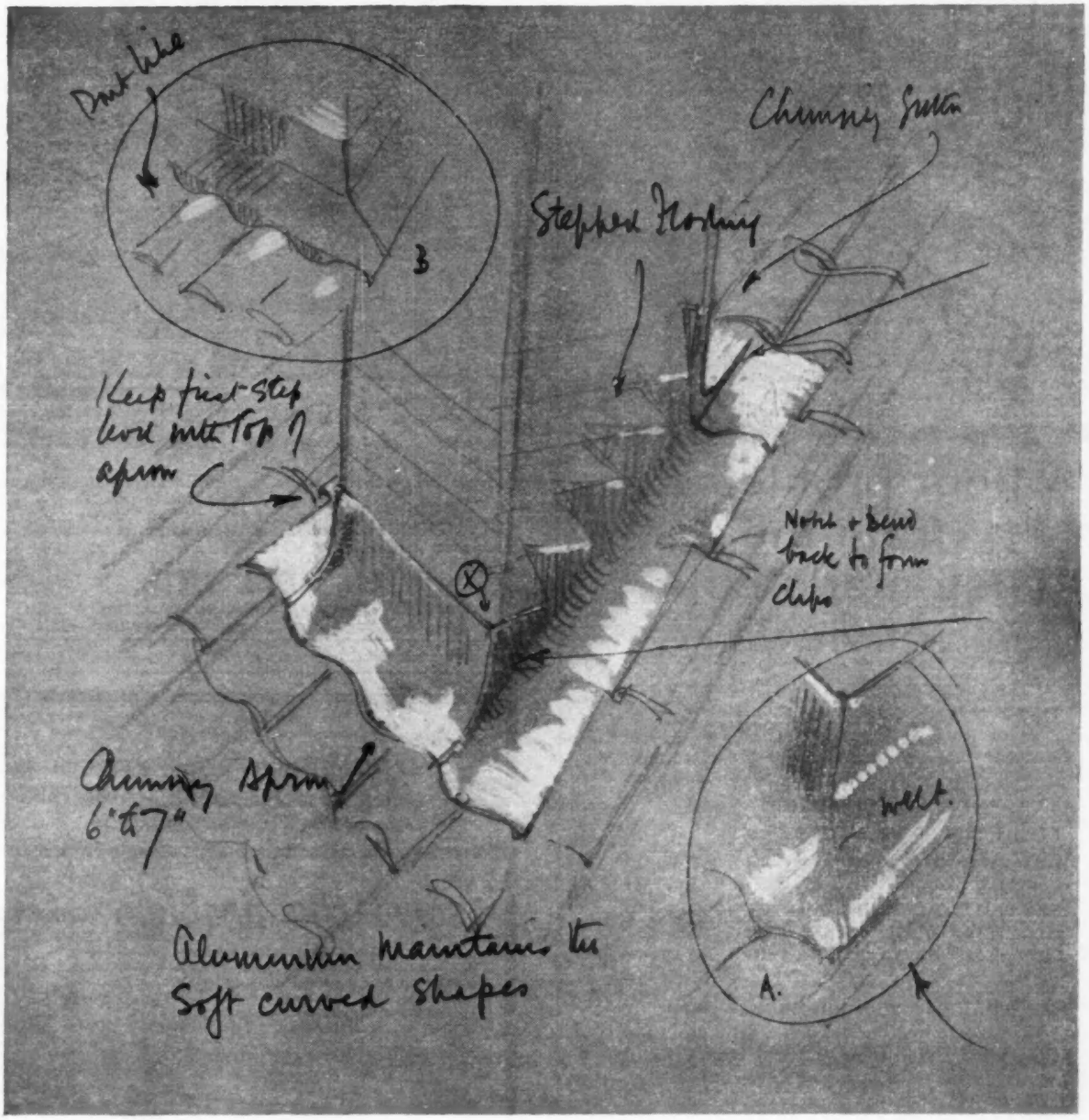
(A) WHITWORTH UDC.—Fixed price tenders for 36 dwellings, etc., at Moss Side-st., Shawforth, nr. Rochdale.

MARCH 20

(A) CHADDERTON UDC.—Fixed price for public conveniences and electricity substation at Wallis-st., Butler Green. E&S. Dep. £2 2s.

(A) LIVERPOOL CITY C.—Erection of four dwellings at Tryweryn Valley, Merionethshire. Water E.

THIS IS ALUMINIUM



Architect's drawing of flashing with notes

BRITISH ALUMINIUM

British Aluminium Super Purity (99.99%) flashing material is aluminium in its most *workable* form. And this is only one of its many pleasing attributes. It lasts a building's lifetime and is . . . *good looking* . . . *light in weight* . . . *low in price and now less glaring!* Send for literature on Super Purity.

BRITISH ALUMINIUM COMPANY LTD. Norfolk House, St. James's Square, London, S.W.1 | Trafalgar 8888

floor problems from the customer's point of view

"It looked marvellous at first. But we're having so much trouble keeping it clean. And it's not wearing too well." Does this sound familiar? Still you can't expect the customers to know about floor maintenance. So there's only one way to avoid all this!

CALL IN FTL!

FTL produce a range of revolutionary liquid floor treatments based on the principle of *sealing*. These treatments combine a wax-like shine with a tough, semi-permanent finish that cuts maintenance to a minimum. And that's not all:

Only FTL can offer this service—free!

FTL experts will call at the site, examine the floors and recommend the best type of treatment.

FTL will supervise the application of the treatment.

FTL will call on the owner of the building periodically to ensure that he is getting the best results from FTL service.

All this is free and without obligation. So call in FTL right at the start of a new project. Contact:

FTL ADVISORY SERVICE
FLOOR TREATMENTS LTD (Dept B)
Lloyds Bank Chambers, High St., High Wycombe, Bucks
Tel: High Wycombe 4214
Also at: Norwich Union Bldg., City Sq., Leeds, Tel: 23188 and Nicol Place, Leith, Edinburgh, Tel: Leith 39166

PEEL'S
sectional buildings quickest up! longest up!

- Easy to erect
- New timber throughout
- Extensive range of standard designs
- Individually designed if required
- Free delivery within 200 miles radius

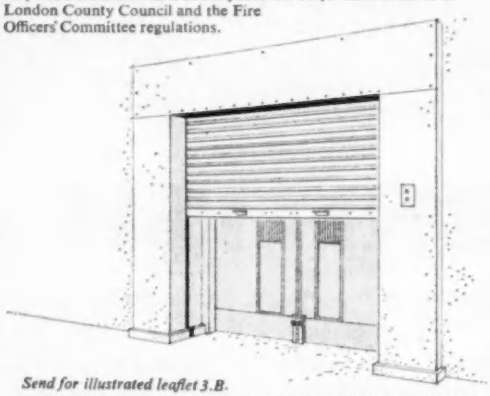
Send for PEEL'S comprehensive catalogue and price list, or ask for representative to call.

H. PEEL LTD.
(Dept. DB) Mearclough Works, Wakefield Road, Sowerby Bridge, Yorkshire. Tel.: Halifax 81211

KINNEAR FIRE SHUTTERS
by the makers of Kinylon and Kinrod Grilles

solve the problem

of fires that could cost you more than any insurance would cover. Absolutely fire-proof, Kinnear Fire Shutters save useful wall space and need no ugly floor or overhead tracks. Adaptable to any surround, they remain unseen when not required for duty. Manufactured to London County Council and the Fire Officers' Committee regulations.



Send for illustrated leaflet 3.B.
ARTHUR L. GIBSON & CO. LTD., TWICKENHAM, MIDDLESEX.
Telephone: Popesgrove 2276. Birmingham: Highbury 2804. Glasgow: Halfway 2928. Cardiff: 51428.

(A) MONTGOMERYSHIRE EA.—Erection of Guilsfield prim. sch., nr. Welshpool. County A.

(A) SHREWSBURY BC.—Fixed price tenders for underground public conveniences at St. Alkmund's-sq. Boro' S. Dep. £2 2s.

(A) STRATFORD-UPON-AVON BC. — Fixed price tenders for 16 flats and 18 houses at Masons-rd. estate. Boro' E&S. Dep. £2 2s.

MARCH 21

(A) CARLISLE CITY C.—Erection of Morton infants' sch. City S.

MARCH 23

(A) CHELMSFORD BC.—Fixed price tenders for 56 houses, 24 flats and 85 garages at Meadgate. Boro' E. Dep. £2 2s.

(A) DAGENHAM BC. — Conversion of classrooms into a kitchen at Valence prim. sch., Bonham-rd. Boro' S. Dep. £2 2s.

(A) REIGATE BC.—Fixed price tenders for 14 dwellings at Welton flower gardens, London-rd., Redhill. Boro' E&S. Dep. £2 2s.

MARCH 27

(A) ESHER UDC.—Erection of 14 dwellings and 31 garages at Upper Farm estate, West Molesey. E, S & Planning Officer. Dep. £2 2s.

(A) SALE BC.—Fixed price tenders for 18 dwellings. Boro' E. Dep. £2 2s.

MARCH 28

(A) DURHAM CC.—Erection of a new training centre at Aykley Heads. County A.

(A) HEMEL HEMPSTEAD BC.—Alterations and additions to the works dept. at Cupid Green. Boro' E&S.

(A) ILFORD BC.—Assembly hall and extensions to junior hall at Gearies infants' and junior schools. Boro' E. Dep. £2 2s.

(A) STAINES UDC.—Fixed price tenders for 44 dwellings and 40 garages at Town-la., Stanwell, Middx. Clerk to C. Dep. £2 2s.

MARCH 30

(A) MAIDENHEAD BC.—Firm price tenders for extensions to Corpn. depot buildings at Braywick-rd. Boro' E&S. Dep. £2 2s.

APRIL 4

(AR) STAINES UDC.—(a) Construction of public conveniences at Woodthorpe-rd., Ashford. (b) Construction sports pavilion at Long-la., Stanwell. E&S. Dep. £2 2s. (each contract).

APRIL 7

(A) MORECAMBE & HEYSHAM BC.—Erection of eight garages at Poulton Hall coach park. Boro' E&S. Dep. £1.

SERVICES, PAINTING, MATERIALS, ETC.

MARCH 8

(AR) WIMBLEDON BC.—Painting of street lighting standards, etc. Boro' S. Dep. £2 2s.

MARCH 13

(A) CHESHAM UDC.—Exterior painting of 256 Council dwellings and community room. Housing Mgr. Dep. £1 1s.

(A) STEPNEY MBC.—Supplying and laying of Semtex thermoplastic tiles in 20 dwellings at Ratcliffe housing scheme. Boro' E&S.

MARCH 14

(A) BIRMINGHAM CITY C.—Fixed price tenders for structural steelwork for public lighting depot at Cardigan-st., Birmingham 4. City E&S. Dep. £2 2s.

(A) WEST RIDING OF YORKSHIRE CC. —Site works and erection of a hose drying and drill tower at Clerkheaton fire station. Divisional A.

MARCH 15

(AR) DURHAM CC.—Heating installation at Stockton-on-Tees hostel for aged persons. County A.

(AR) WOLVERHAMPTON CBC. — Subcontract work for home for aged persons, and flatlets, at Broadway, Bushbury. Boro' E.

MARCH 17

(A) WEST RIDING CC.—Painting work at Snaith sec. sch. Divisional Ed. Officer.

MARCH 18

(A) EAST GRINSTEAD UDC.—Fixed price tenders for external painting and fencing works (two contracts). S. Dep. £2 2s. (each contract).

(A) UXBRIDGE BC.—External painting of various houses. Housing Mgr. Dep. £2 2s.

MARCH 20

(A) WEST RIDING OF YORKSHIRE CC. —Installation and internal adaptations at Beech Towers, Staincliffe, Dewsbury. Divisional A.

MARCH 30

(AR) WANDSWORTH MBC.—Inclusion in selected list of approved contractors for electrical work. TC.

(A) WEST RIDING CC.—Painting work at Thorne grammar sch. Divisional Ed. Officer.

NO DATE

(A) JARROW BC.—Materials, etc. Boro' E.

MUNICIPAL AND CIVIL ENGINEERING WORKS, ETC.

MARCH 14

HARROW BC.—Roadworks involving approx. 1,800 sq. yd. of carriageway widening in lean-mix concrete, 4,200 sq. yd. of surfacing in bitumen macadam and fine cold asphalt, and kerbing, footway and drainage works, at Canterbury-rd. Boro' E&S. Dep. £2 2s.

MARCH 20

KINGSCLERE & WHITCHURCH RDC.—Fixed price tenders for the construction of 5,570 lin. yd. of 6-in., 9-in. and 12-in. dia. stoneware and concrete sewers, manholes, lateral drains, pumping station, and 900 lin. yd. of 5-in. dia. spun-iron pumping main at Tadley Sewerage. Lemon & Blizard, Ccl's constg. engrs., Telford-hse., Hulse-rd., Southampton. Dep. £5 5s.

STAFFORDSHIRE CC.—Construction of a second carriageway for a distance of approx. 1½ miles on the Exeter-Leeds trunk road (Lichfield-Burton-on-Trent), A.38, from Wychnor Farm to a point just south of Barton Turn. The work includes fencing, drainage, kerbing and the laying of granular sub-base, cement-bound macadam base and two course asphalt surfacing. Clerk to C. Dep. £5.

MARCH 27

DAVENTRY RDC.—Fixed price tenders for the laying of about 6,000 yd. of sewer, mainly 12-in., 9-in. and 6-in. dia., the laying of drain connections, the reinstatement of roads, and the construction of sewage disposal works at Everdon and at Welton, Northants. Pick, Everard, Keay & Gimson, Ccl's constg. engrs., 6 Millstone-la., Leicester. Dep. £5 5s.

APRIL 11

LEXDEN & WINSTREE RDC.—Fixed price tenders for the construction of approx. 6,750 yd. of 6-in. and 9-in. dia. concrete and glazed stoneware pipe sewers, together with manholes, pumping station, 313 yd. of 4-in. dia. asbestos-cement rising main, and extensions to an existing sewage disposal works comprising balancing/detritus tank, settlement tank, bacterial filter bed, humus tank, sludge drying beds and site pumping station, at Fordham. Elliott & Brown, civil engrs., Stanley-hse.,Pelham-rd., Nottingham. Dep. £5 5s.

GENERAL BUILDING WORK (LONDON)

HESTON & ISLEWORTH. — **Residential** Development.—Subject to planning consent being obtained and to the approval of the Minister of Housing and Local Government for loan purposes, the BC are to adopt a scheme for the development of approximately 5 acres of land at the junction of Hall-rd and Whitton Dene, Isleworth, by the erection of dwellings for sale. The development will consist of 32 three-bedroomed houses, 36 two-bedroomed flats and 68 attached or detached garages in accordance with a layout submitted by the Boro' E&S.

ISLINGTON.—Aged People's Home.—The Welfare Com. of the LCC propose to acquire, by compulsory purchase if necessary, the sites of 153-167 (odd) Riversdale-rd. and 393a and 393-9 (odd) Highbury Quadrant, Islington, at an estimated cost of £27,000. Together with the site of Royles works between Riversdale-rd. and Highbury Quadrant at their junction with Green Lanes, which is already owned by the Council, this will provide a site suitable for the erection of a home for old people.

LAMBETH.—New Road.—The LCC Roads Com. have submitted an estimate of £72,650 for the engineering works in connection with the improvement of the intersections of Tulse Hill and Christchurch-rd. with Norwood-rd., Lambeth.

LAMBETH. — Road Intersection. — The LCC Roads Com. have submitted an estimate of £49,350 for road works and architectural treatment for the improvement of the northern intersection of Clapham-rd., South Lambeth-rd. and Stockwell-rd., Lambeth. The scheme, approved by the Council on July 14, 1959, has been modified at the request of the Borough Council by the omission of the slip road between the two islands, which will now become one. There will be guard rails round the island except at its southern tip, where pedestrian access will be provided at the traffic signals.

LAMBETH. — Housing. — MBC have approved plans submitted by the Director of Housing for the erection of a five-storey block of flats on Bowden-st. site, with the following accommodation:—10 three-roomed maisonettes, 5 one-roomed flats, 5 tenants' stores, 4 parking spaces.

LAMBETH. — School Adaptations. — The LCC Ed. Sub-Committee have approved plans for the second stage of adaptations at Loughborough county primary school, Lambeth, at

Contracts Placed

We are glad to receive from architects and quantity surveyors for publication details of contracts placed to the value of £20,000 or over. Such information should reach the Editor as soon as possible after the contract is signed. Names of the architect and other consultants associated should be given.

QUARZITE
A NATURAL STONE
MERCHANT NAVY
HOTEL
SWANSEA
FACINGS
SUPPLIED & FIXED
BY
JOHN STUBBS
(MARBLE & QUARZITE) LTD.
LIVERPOOL 7
TELEPHONE ROYAL 4951

a cost of £85,990. Premises formerly occupied by Loughborough secondary school will be adapted to accommodate 320 junior boys and girls and a new block will be built for 240 infants.

LEWISHAM.—Permanent Housing.—The MBC Housing Committee recommend that the sites of Nos. 5/23 (odd) Siddons-rd. and land adjoining No. 4 Normanton-st. be developed by the Council by the erection of 31 dwellings for occupation by elderly persons, a warden's flat and 4 garages.

(PROVINCIAL)

ALNWICK.—UDC is to build 29 houses in the Green Batt area. Surveyor is G. Beaty.

BANGOR.—Following for TC: New fire station near Crossville depot; new swimming baths at Garth Fields.

BARNSLEY.—BC has received Ministry approval for erection of St. Helen's sec. mod. sch.

BERKS.—Berks. & Reading Fire Auth. propose new fire stations at Wokingham-rd., Reading (£31,000), Downshire-way, Bracknell (£35,000) and Wokingham £(10,000).

BEXHILL-ON-SEA (Sussex).—TC are to build 16 houses in Sidely-st. and North-rd. Est. £28,000.

BINGLEY.—Bingley Building Socy. propose erection of new head office in town centre area.

BLACKBURN.—A new secondary modern school, to cost about £250,000, is planned by Blackburn Deanery for Salesbury.

BOURNEMOUTH.—BC is to consider application for turning Royal Bath Hotel into building with bars and restaurant on 2 storeys, with an 18-storey block of 131 flats and garage space for 180 cars underneath. . . . Old Bournemouth school for girls, Gervis-rd., is to be adapted for use by Municipal College. Est. £20,990.

BRADFIELD.—RDC propose erection of houses at Burghfield/Mortimer/Theale/Tilehurst / Pangbourne / Purley / Beenham / Basildon/Bucklebury.

BRIGHOUSE.—Town centre re-development scheme submitted to Goddard & Smith, town development consultants.

BRYNMAWR.—Council are to purchase a site in the town which would site 60 to 70 houses. The Council are considering allowing private builders to develop the site.

BURNLEY.—CoE Auth. propose erection of co-ed. sec. mod. sch. at Ridge-ave. Est. £100,000.

CARLISLE.—B. Mandale proposes erection of large storage premises at Botcherby Mill.

CARSHALTON.—An outline application for planning permission to build a 14-storey £500,000 all-glass, skyscraper hotel on the site of 230 and 234 Carshalton-rd., Carshalton, is being discussed by the local planning authorities. Architect is Mr. Gordon F. Little, of 51 Mulgrave-rd., Sutton. The hotel will hold about 300 people and will have an 11-storey tower block of residential accommodation and staff offices, the ground and first floors being devoted to a hotel reception lounge, bars and a kitchen, together with a hall for meetings and a first floor restaurant with a large open-air sun deck.

CHADDERTON.—CoE Auth. propose erection of new church at Parish of St. Mark's.

CHEADLE.—RDC propose housing development at Woodhead.

CHERTSEY.—Surrey EC propose first instalment of Stepgates county sec. sch. in 1961 programme. Est. £265,741.

CHESTERFIELD.—Derbys. EC propose extension to College of Technology. . . . BC to seek Ministry approval for erection of new transport depot at Sheffield-rd. Est. £693,000. . . . J. S. Wilcockson Ltd. propose erection of office/showroom at Docks Walk.

CHIPPING NORTON (Oxon).—RDC is to give further consideration to plans for providing 25 one-bedroom bungalows, 16 two-bedroom flats, 12 three-bedroom houses and parking and garage space for up to 70 cars at The Drive, Enstone. T. Rayson, architect. . . . RDC is to include total of 50 dwellings in current building programme.

CHRISTCHURCH.—The Earl of Malmesbury has submitted applications for residential development of land at St. Catherine's Hill, Hurn-rd., nr. Christchurch.

CLITHEROE.—Land has been leased at Mayfield-ave. by BC to Ribblesdale Cement Ltd. for housing purposes.

CROWTHORNE.—Plans are being prepared for demolition of Wellington Hotel and erection of 32 flats, 16 houses and a PH.

DURHAM.—Durham University are to carry out a £3,000,000 extension scheme at Durham Colleges.

ESHER.—UDC has approved housing development near Sandy-la., Cobham, for Mrs. K. Taylor.

GAINSBOROUGH.—Permission to build what will be the most powerful steam power station in western Europe has been given by the Minister of Power to the Central Electricity Generating Board. It will be at West Burton, along the River Trent, and will cost between £50m. and £60m.

HARTLEPOOL.—Boro' E (John Wilkin) has prepared sketch plans for the erection of maisonettes and single occupier houses in the Headland area of Hartlepool.

HEXHAM.—UDC is considering the erection of 40 houses 'for sale' at Causey Hill. Council's Surveyor is W. A. Hancocks.

HEYWOOD.—Heywood Fine Shops Ltd., Piccadilly, London, W1, propose erection of supermarket on site of Roxy Cinema.

ILKESTON.—BC propose erection of new swimming bath at Manners-rd. Est. £160,000.

INCE.—UDC propose housing development at Platt Bridge. . . . Mr. G. Ormrod proposes residential development east of Petticoat-la.

LANCS.—Lancs CC propose erection of child welfare centre/school clinic at Leyland and Ulverston.

LIVERPOOL.—The City C's Redevelopment (Special) Committee has approved the overall plan of Ravenseft Properties Ltd. for their £10m. plan to develop the St. John's market.

LIVERPOOL.—J. Malcolm & P. J. Gannon propose erection of 42 dwellings at Grange-la. . . . F. W. Woolworth & Co. Ltd. propose rebuilding shop premises at Park-rd. . . . J. L. & A. Properties propose erection of 3-storey block of 9 flats at Alexandra-drive. . . . Proudlake Investment Developments Ltd. propose erection of two blocks of 36 flats at Alexandra-drive/Aigburth-rd. . . . Regional Hospital Bd. has given approval in principle for new headquarters of Regional Blood Transfusion Service.

LUTON.—The TC's proposal to erect a multi-storey car park is at the stage where the Highways and Planning Committee has recommended the TC to approve a list of some 32 firms which are prepared to submit a scheme and a tender for the project. Plans by F. Oliver, AMICE (Boro' E&S). A decision is expected in about 3 months.

MANCHESTER.—Hollingdrake Automobile Co. Ltd., Stockport, propose 7-storey showroom and office block at Peter-st. The Bentley Building Co. Ltd. propose erection of residential hotel at Cheetham Hill-rd. . . . TC approval in principle received for erection of new BBC headquarters at Oxford-rd/Brook-st. . . . Gula Investments Ltd. propose erection of 8-storey block of flats/garages at Dene-rd. . . . John Williams & Sons Ltd. propose erection of warehouse/offices at Stanley-rd., Cheadle Hulme.

NEWCASTLE-ON-TYNE. — Sketch plans for additions to the headquarters of Newcastle Hospital Bd., Benfield-rd., Newcastle-on-Tyne, have been approved. The cost will be about £47,000. The Bd.'s Chief A is P. H. Knighton. The quantity surveyors for the work are Barrett, Sons & Ptnrs., 33 High Bridge, Newcastle-on-Tyne.

OXFORD.—Regional Hospital Bd. have appointed Ballard and Beese, 34 St. Giles, Oxford, as architects for extensions to nurses' home at Royal Bucks Hospital, Aylesbury. . . . Shell Research Ltd. propose extensions to admin. block at Agricultural Research Centre, Woodstock. Architect is Frederick Gibberd, 8 Percy-st., London, W1.

PORTSMOUTH.—City C has approved planning consent for development of land on north side of Arundel-st., Landport, and east of Clarendon-pl. for 2 and 3-storey buildings. It is to comprise shops at ground floor level and bowling centre and dance hall at first and second floor levels for Plutarch Securities Ltd.

PRESTON. — The Town Planning and Development Committee has agreed to withdraw its scheme for compulsory purchase and redevelopment of the Bamber's Yard shopping area of the town. Subject to Town Council approval, the area will now be developed by the Murrayfield Real Estate Co.

RICHMOND (Surrey). — Proposals have been drawn up for a composite building on top of the present railway station at Richmond, Surrey. Plans provide for a garage for 650 cars, a GPO sorting office, a bowling alley and a seven-storey office block. The scheme is the idea of the Industrial Development Group. This is a consortium of 11 civil engineering companies, including Dorman Long and Wimpeys. It is intended that the garage, of two storeys, should save space by sideways parking. This method, which uses electrically powered trolleys, is claimed to increase 'normal' parking space by one-third.

ROWLEY REGIS.—BC propose erection of 88 flats at Bury Hill estate.

RUNCORN.—Ches. CC propose erection of old people's home at Grangeway. . . . UDC propose residential development on 10½-acre site at Latham-ave. . . . Greenall Whitley & Co. Ltd. propose erection of new public house, 'The Cherry Tree,' at Grange neighbourhood unit. . . . Mr. D. Kliza, Wallasey, proposes erection of 32 sd houses off Sea-la. . . . The National Union of General & Municipal Workers propose erection of assembly hall/union offices at York-st. . . . Littlemore Bros. propose erection of bakehouse/shop at Granville-st.

SADDLEWORTH.—At a cost of about £25,000, Saddleworth (Yorks) Council is to build an old people's bungalow estate at Wade Row, Uppermill.

SALFORD.—Manchester Regional Hospital Bd. propose erection of new maternity unit at Hope Hospital. . . . TC propose to spend £26 million on development programme to include schools/housing/youth centre/children's home/swimming baths/street lighting.

SHEFFIELD.—Sheffield Regional Hospital Bd. propose extensions to board headquarters.

SHEFFIELD.—Following for TC: Acquisition of site for St. Thomas of Canterbury RC prim. sch., Woodseats; occupation centre at Norfolk Park, £95,680 est.

SHROPSHIRE.—CC Welfare Committee are planning to build two new old people's homes, one at Briarfields, Shrewsbury, and the other at Fairholme, Oswestry. Building costs are estimated at £56,405 for the Shrewsbury home, and £57,675 for the Oswestry project.

SKIPTON.—UDC propose erection of flats and shops at Newmarket-st. redevelopment area.

STANDISH.—CoE Auth. propose 1st phase of jun. sch. at Rectory-la.

STOCKTON-ON-TEES.—Plans have been prepared by R. Cowan, 20 Finkle-st., Stockton-on-Tees, for the erection of houses at Hartburn-ave., for Stanley Curry. . . . L. Auton, Regents-bldgs., York-rd., West Hartlepool, has prepared plans for housing developments at Junction Farm estate for C. M. Yuill Ltd., builders and contractors, Villiers-st., West Hartlepool.

SUNDERLAND.—The Corporation Housing Committee has approved the principle of erecting 11-storey blocks of flats in the Coronation-st. area.

SUTTON.—A five-storey block with a basement car park, ground floor shops and offices above is to replace the Cock Hotel, Sutton, which is now being demolished. Commercial and Suburban Properties Ltd. acquired the site for £125,000 and the total project is expected to cost about £250,000. Architect is Douglas Burford, of Banstead.

SWINDON.—Boro A to prepare plans for new Courts of Justice in the central redevelopment area and to appoint Bare, Leaning and Bare, 31 Faringdon-rd., Swindon, as quantity surveyors.

TODMORDEN.—BC propose erection of multi-storey flats at Scott-st.

M-F 35 does it all-faster and cheaper!

Light, extremely mobile, and yet for its weight it packs more sheer power than any other tractor in its class. The Massey-Ferguson 35 does more jobs more quickly than any other single power unit you can buy.

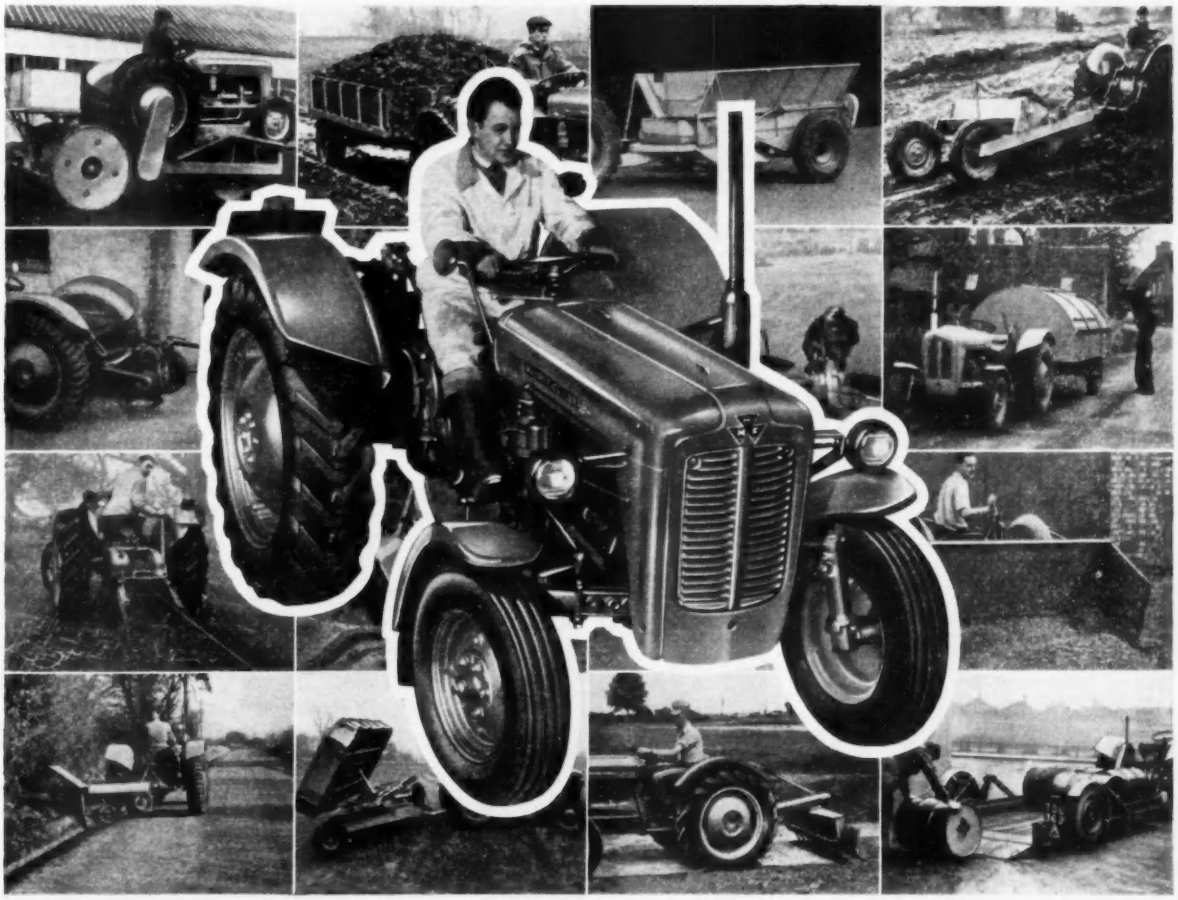
Versatile Equipped with the most advanced hydraulic system in the world—the famous Ferguson System, the M-F 35 teams perfectly with the many specialised machines designed to operate on traction or hydraulic power. A few examples—verge-trimmers, road-brushes, trench diggers, fork lifts, winches, earth movers and scoops, mowers, pneumatic drills and trailers of every kind.

Easy to operate All power units are precision operated by the driver from finger-tip controls. All attachments have standard couplings and are fitted quickly and easily to the M-F 35—usually by the driver himself. This eliminates time waste between jobs and saves valuable man hours.

Cuts costs One man operating an M-F 35 becomes a highly skilled and efficient team, replacing expensive manpower and keeping costs right down. Right round the clock, the M-F 35 pays its way, completing job after job in minimum time.

Easy on fuel too. The M-F 35 has all the advantages of small tractor economy combined with Ferguson System capacity for extra heavy work.

Seeing is believing Why not get in touch with your M-F distributor for a complete demonstration of the M-F 35. Do it soon.



Some machines designed for use with M-F 35 industrial tractor

Twose Tractamount Roller
Sturdiluxe Road Brushes
Hoggarth Homagarth Refuse Collector
Boughton Winch
Pattisson Parkover Gang Mower
Modern Plant Autoloader
Bunger Trailer
Beresford Watermaster Pump
Hargreaves Sisis Turf Piercer
Atkinson Road Gritter
Armstrong-Whitworth Pneumatic Tools
Twose Somerset Verge Trimmer
Ibbett Eezion Trailer

MASSEY-FERGUSON

Some M-F built machines

736 Mower
Compressors
Earth mover
Post-hole digger
Fork lift
3-ton trailer
735 loader
Sub-soiler
Winch
Dump skip
Earth scoop
Multi-purpose blade
Transporter

Discriminating

Architects

Specify

McNeills'

LEADONITE

LEAD BASE

or

ASTONITE

ASBESTOS BASE

the best of

Damp Courses

Manufactured to BS 743.

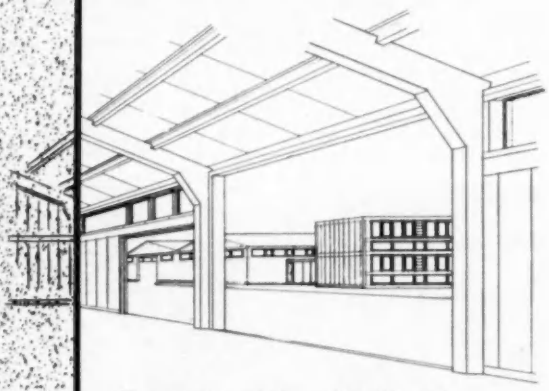
Write or telephone for details and samples.

McNEILL'S

DAMP COURSES

F. McNEILL & CO., LTD. 10 LOWER GROSVENOR PLACE, LONDON, S.W. I. *Telephone: VICtoria 6022*

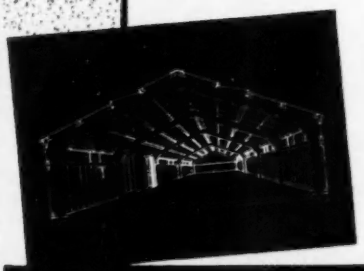
MODERN DESIGNED CONCRETE BUILDINGS . . .



The range of new "Alborough" prefabricated concrete portal frame factory buildings and two storey office blocks are available in a wide range of structures, adaptable to meet individual requirements.

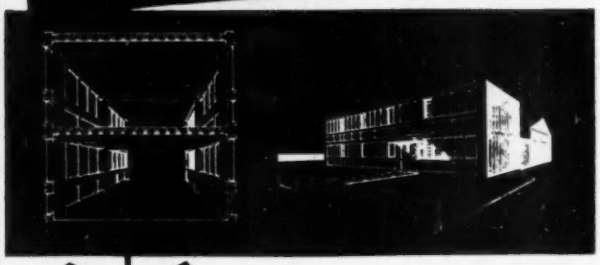
These buildings are provided complete with cladding to include windows and doors. They are attractive, economic, robust and fast in erection.

Frames and Floors for blocks of multi-storey flats, maisonettes, etc., designed to Architects requirements, supplied and erected.



Full service available to include design, supply and erection.

Consult our team of specialists or write for our illustrated technical brochure.



Alborough

ALBOROUGH PRECAST CONCRETE BUILDINGS

A.B.C.D. (Raynes Park) Ltd.,

34-5 Alpha Rd., Surbiton, Surrey. Tel: ELMbridge 6591

TWICKENHAM.—New science block proposed at St. Katherine's Covent. Architects are Dodge and Reid, 72 High-st., Brentford.

TYNEMOUTH.—Discussions are taking place between the TC and the Murton Farm Estates Ltd. regarding proposed private housing developments at Burton House Farm, New York-rd. Architect is William Stockdale, 73 Howard Street, North Shields.

UXBRIDGE.—Mogron Ltd., Baker-rd., Uxbridge, propose new factory and offices at Arundel-rd. Plans by A. E. Silver, 'Silvenda,' Park-ave., Wraysbury.

WALLINGFORD. — Oxfordshire County Planning Auth. has approved, in outline, scheme for development of Carmel College, Mongewell Park, nr. Wallingford, to accommodate a further 200 pupils. Est. £300,000.

WALLSEND.—Thermal Syndicate Ltd., Wallsend, are to carry out extensions to their works. The cost, it is understood, will be about £100,000, and work is expected to start during the next two or three months. Architects are L. J. Couves & Ptnrs., Grainger-chbrs., Hood-st., Newcastle-on-Tyne.

WAKEFIELD.—H. Waterhouse & Sons propose erection of 35 dwellings and eight bungalows off Portobello-rd.

WEDNESBURY.—R. F. Steward Ltd. propose erection of new factory at Portway-rd.

WENLOCK.—BC propose erection of new swimming baths at Broseley. Est. £93,000.

WEYBRIDGE.—UDC approved conversion of the Odeon Cinema, Queens-rd., as a garage, showroom and repair shop.

WHITEFIELD.—UDC approved overspill housing development for Manchester TC.

WIDNES.—Lancs. CC propose erection of new factory to be leased by H. Marks Ltd., Manchester. Est. £50,000.

WOKING.—UDC propose new swimming pool.

WOODCOTE (Oxon).—Mr. & Mrs. J. A. Lait propose housing development on 10-acre site at Capilano Farm. Inquiry held.

WOODLEY.—Berks. CC propose aged persons' hostel in the Woodley-Earley area.

TENDERS

(A) Denotes *accepted*.
(PA) Denotes *provisionally accepted*.
(RA) Denotes *recommended for acceptance*.
(AM) Denotes *accepted subject to modification*.
(GD) Denotes *accepted subject to approval by appropriate Government Department*.

ALDERSHOT.—Erection of 116 'Homeville' houses at Heron Wood estate for BC. (A) E. Clarke & Son (Addlestone) Ltd.

BELFAST.—Erection of new eye, ear, nose and throat hospital at Falls-rd. for Northern Ireland Hospitals Authority. (A) J. M. Reilly Ltd., 7a Esther-st., Belfast 15.

BINGLEY.—New head office for the Bingley Building Soc. (A) L. & W. Morrell Ltd., Bradford.

BIRMINGHAM.—Erection of 100 luxury flats at Richmond Hill-rd. for Holloway Developments Ltd. J. H. D. Madin, architect. (A) Holloway Bros. (London) Ltd.

BLACKBURN.—New bedroom wing at YMCA, Southfield. (A) H. Ibbotson & Son Ltd., Blackburn, £32,973.

BOLDON.—Erection of 50 houses at North-rd., Boldon Colliery, for UDC. (A) G. Durham & Co. Ltd., £69,250.

BRADFIELD (Berks.).—Erection of shops and flats at Calcot for RDC. (A) J. T. Thurley Ltd., £21,691.

BRISTOL.—Preliminary work in connection with new School of Chemistry for Bristol University. Courtaulds Technical Services Ltd., architects and consultants. (A) Holland & Hannen and Cubitts (Great Britain) Ltd., £129,000.

COLCHESTER.—Fixed price tenders for: (a) 80 dwellings at Greenstead, and (b) 36 garages at Ipswich-Harwich-rd. site for BC. Boro' A is Vinton Hall. (A) Direct labour, £128,219 and Hutton (Builders) Ltd., Birch, Colchester, £178,462, respectively.

DALTON-IN-FURNESS.—Erection of new production premises for Hodgkinson & Gillibrand Ltd. (A) Wm. Townson & Sons Ltd., Bolton, £23,000.

GLOUCESTER.—New wholesale house at Eastern-ave. for W. H. Smith & Son Ltd. H. F. Bailey (Chief A to Smith's), architect. (A) Ford & Weston Ltd., £950,000 (approx.).

GUILDFORD.—Extensions at Guildford School of Art for Surrey CC. (A) Cawood Wharton & Co. Ltd., London.

HARTLEPOOLS.—Provision of outpatient dept. and administration offices, and conversion of subsequently vacated accommodation into approved casualty dept. at Hartlepools Hospital, for Newcastle Regional Hospital Bd. (A) G. H. Plemper Ltd., £24,713.

HIGH WYCOMBE.—New showroom at Bridge-st. for Rye Machinery Sales Ltd. (A) G. Biggs & Sons, Great Kingshill, nr. High Wycombe.

HEYSHAM.—Extensions to Heysham CoE sch. (A) Nicholson & Wright, Lancaster.

KEYNSHAM.—First phase of redevelopment of civic centre, Bath Hill. A. E. J. Hodges, Architect to Council. (A) Holland & Hannen and Cubitts (Great Britain) Ltd., £115,000.

LEEDS.—Extensions to Parklands high sch. for TC. (A) Samuel Flockton Ltd., £39,946. Factory and offices at Ring-rd., West Park, for William Rhodes Ltd. (A) Wm. Airey & Son, Leeds, £200,000.

LIVERPOOL.—Erection of two 10-storey blocks of flats at Vale-rd. for TC. (A) Wm. Townson & Sons Ltd., Bolton, £283,829.

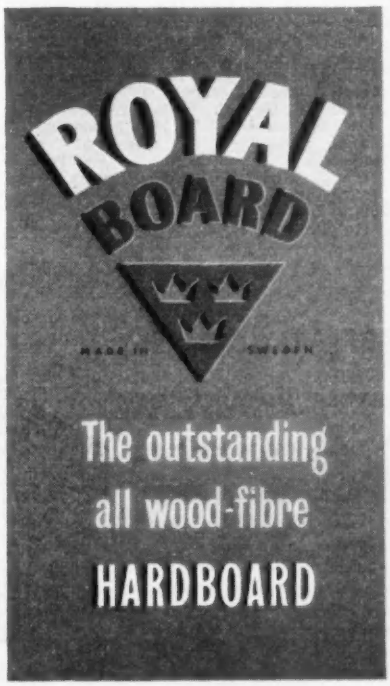
LLANDARCY.—Building improvements at oil refinery for BP Ltd. J. M. Wilson, H. C. Mason & Ptnrs., architects. (A) The Demolition & Construction Co. Ltd., £198,000.

LONDON CC.—External painting of The County Hall, including the north and south blocks.

J. J. Dean Ltd.	£41,892
W. J. Simms & Cooke Ltd.	31,503
P.C.S. Ltd.	28,714
Architectural Decorators Ltd. ...	25,475
(A) Holland and Hannen & Cubitts (Great Britain) Ltd.	24,753

Architect's comparable estimate is £27,125.

(GD) LONDON (Air Ministry).—Contracts to the value of £4,000 or over for week ended February 24: *Building work:* Ruislip, Middlesex; Woodcock Marshall & Co. Ltd., 2 Westbourne-grove, London, W11. Birdlip, Gloucestershire; W. J. B. Halls Ltd., Barton Gates, Gloucester, Glos. Waddington, Lincolnshire; Frank R. Eccleshare Ltd., Dixon-st., Lincoln. *Artificers' work:* Wartling, Sussex; R. Corben & Son Ltd., 2 Pelham-st., Hastings, Sussex. Fairford, Glos.; Geo. Foster (Contractors) Ltd., Leamington-rd., Broadway, Worcs. Upavon (Wilts.), etc.; Dudley Coles Ltd., 6-13 Bath-st., Plymouth, Devon. *Preparation and maintenance of lands:* Binsbrook, and Hemswell, etc.; Jack Branch (Airfields) Ltd., Winfold-rd., Waterbeach, Cambs. Scampton (Lincs.), Conningsby (Lincs.), Cattesmore (Rutland), etc.; Stanley H. S. Overton (Airfields) Ltd., Navenby, Lincoln. *Internal heating installations:* Tangmere, Sussex; Walter Cowen Ltd., Souldern-rd., London, W14. *HPHW heating installation:* Wittering, Northamptonshire; Edwd. Deane & Beal Ltd., Temple-chbrs., Temple-ave., London, EC4.



(GD) LONDON (British Railways).—Contracts placed by Eastern Region: Building work in connection with new Sub-Stations at March (Whitemoor); Coulson & Son Ltd., 37 St. Andrews-st., Cambridge. Maintenance and small construction building works in the Ipswich district; Eley & Wesley, 74 Chilton-rd., Ipswich, Suffolk. Maintenance and small construction building works in the Doncaster district; Charles R. Price, Barnsley-rd., Doncaster. Erection of a block of four single-storey coal order offices at Ilford: Fullers (Builders) Ltd., 68 Beulah-rd., Walthamstow, London, E17. Maintenance and small construction building works in the Peterborough district; C. L. Sewell, 104 Carlton-rd., Boston, Lincs. Maintenance and small construction building works in the Peterborough district; Fosters Builders, Wharf-rd., Grantham, Lincs. Maintenance and small construction building works in the Peterborough district; F. Coles (Builders) Ltd., 11 The Bungalow, Great North-rd., Stibbington, Wansford, nr. Peterborough. Maintenance and small construction building works in the Sheffield district; Charles R. Price, Barnsley-rd., Doncaster. Works in connection with the maintenance of bridges in the Eastern Region; Carter-Horseley (Engrs.) Ltd., Merebank-la., Waddon, Surrey. Provision of ticket office and temporary station entrance at Finsbury Park station; W. & C. French Ltd., Buckhurst Hill, Essex. Erection and completion of a new single-storey extension to the staff hostel at Scunthorpe; G. Chessman Ltd., Scotter-rd., Scunthorpe.

(GD) LONDON (Metropolitan Police).—Recent contract placed: Retaining walls, concrete roads and miscellaneous preliminary work in connection with erection of new Section House at Nth. Circ.-rd., Amberden-ave., Finchley, N3. Messrs. W. & C. French Ltd., £17,599.

(GD) LONDON (MoW).—Contracts placed for week ended February 18: *Berkshire:* Erection of temporary laboratory, Road Research Station, Crowthorne; H. Russell, Ltd., Woodley, Reading. Erection of structures at meteorological office, Bracknell; W. E. Chivers & Sons Ltd., Devizes, Wiltshire. *Caithness:* Adaptations at Post Office store, Girnigoe-st., Wick; Alexander Sutherland Ltd., 21 Francis-st., Wick. *Hereford:* Erection of New Crown building, Broad-st., Hereford; Wilson Lovatt & Sons Ltd., Clarence-st., Wolverhampton, Staffordshire. *Lancashire:* Adaptations at Post Office, Eccles Cross Church-st., Eccles; Smith & Thompson Ltd., 244-246 Upper Brook-st., Manchester 13. Conversion to garage of Post Office stores, River-st., Hulme, Manchester; E. Jones & Rawlinson Ltd., Leaf-sq., Salford. *London:* Repairs—dry rot treatment—at Joint Office Building, 1a Montague-st., WC1; T. G. Waterman Ltd., 189 Whitechapel-rd., E1. Redecoration of Ministry of Works Lambeth Bridge House, SE1; Spraycraft Co. Ltd., 101-2 Palace-rd., Bromley, Kent. Internal redecoration to Post Office, King Edward Building, EC1; J. W. Green (Painters) Ltd., 171 Graham-rd., SW19. *Midlothian:* Alterations to Branch Post Office, Frederick-st., Edinburgh; Mr. A. Kent, 22 Brunswick-rd., Edinburgh. *Monmouthshire:* Erection of Post Office sorting office and telephone exchange, Priory-st., Monmouth; G. E. Wallis & Sons Ltd., Cambrian Chas., Cambrian-rd., Newport. *Wiltshire:* Erection of telephone exchange, Salisbury; John Hunt Ltd., South Wharf, Cleveland-rd., Gosport, Hampshire. *Yorkshire:* Removal of concrete bases and services at Kingsway West, Windsor Garth, York; Wm. Birch & Sons Ltd. Spen-la., York.

(GD) LONDON (War Dept.).—Contracts placed for week ended February 10: *Berkshire:* New squash court at Shrivenham; Davies & Rentowl (Aldershot) Ltd., St.

Albans. Fencing at Arborfield; Supreme Fencing Ltd., Watford. *Co. Down:* Building at Ballykinler; John Sinton Ltd., Tandragee.

UNITE FOR STRENGTH

THE FEDERATION OF MASTER BUILDERS

The Largest Individually Representative Organisation in the Kingdom

Membership Over 12,000

Regional Offices in: BIRKDALE BIRMINGHAM, BRISTOL, CAMBRIDGE, CARDIFF, EDINBURGH, LEEDS, LONDON, NEWCASTLE AND SEVENOAKS
OVER 130 BRANCHES

SUBSCRIPTION £6.6.0. p.a.

Service to members includes free monthly issues of the *Federation Journal*

THE FEDERATION OF MASTER BUILDERS
33 John Street, Holborn, London, W.C.1
Tel: CHANCERY 7583 (6 lines)

Please send particulars of the advantages of membership to

Kindly cut along dotted lines

B3/3/61

Essex: Playground equipment at Colchester; T. J. Archer & Co. Ltd., Halstead. *Gloucester:* Electrical at Ashchurch; Beaven & Sons Ltd., Gloucester. *Inverness-shire:* Miscellaneous at Inverness; C. Young & Son, Nairn. *London:* Roofing; Roberts Adlard & Co. Ltd., Croydon. *Midlothian:* Miscellaneous at Dreghorn, Glencorse & Woodhouselee; Johnston & Clelland, Musselburgh. *Surrey:* Building at Brookwood; Croudace Ltd., Caterham.

MAIDSTONE.—Erection of 29 'Homeville' dwellings at Church-st./Chatham-rd. for BC. (A) P. A. Barden & Son Ltd., Maidstone.

MERE & TISBURY.—Erection of 52 'Homeville' dwellings at The Avenue, Tisbury, for RDC. (A) A. Hammond & Sons Ltd., Dorset.

MIDDLESBROUGH. — Erection of 79 houses, 16 flats and 34 garages at Easterside (separate or three contracts) for CBC. (A) Marway Builders Ltd., 31 Connaught-rd., Nunthorpe, £46,404, Moore & Cartwright, High-st., Norton, £58,402 and C. W. Athey Ltd., 15 Windsor-rd., Middlesbrough, £58,936.

MORPETH.—Erection of 89 houses and bungalows at Spelvit-la. housing estate for TC. (A) James Dodds & Son, Dark-la., Morpeth.

OXFORD.—Erection of 20 flats and maisonettes at St. Ebbe's estate for City C. (GD) J. Laing & Son Ltd., £63,938.

SALFORD.—Erection of 80 flats and communal laundries at Sussex-st. for TC. (A) Direct labour.

SMETHWICK.—Erection of one eight-storey block of 48 flats and 15 garages at Messenger-rd. for CBC. Designed by Wates Architectural Dept. (Chief A. K. W. Bland). in conjunction with G. F. Elliott. (A) Wates Ltd., £94,467.

SOUTHWARK.—Installation of cylindrical piles for a six-storey block of flats at Southwark-st., SE1, for Union General Properties Ltd. (A) Economic Foundations (gen. contrs. are Sir Robt. McAlpine & Sons).

SUNDERLAND.—Construction of roads and sewers in the Wear-st. redevelopment area for TC. (A) Direct labour, £32,724.

SWINDON.—New factory at the industrial estate for BC. (A) K. J. Leon, 29 Commercial-rd., Swindon.

TWICKENHAM.—Erection of 32 houses and 42 garages at Stirling-rd. for BC. (A) E. J. G. Morgan Ltd., Uxbridge, £77,969.

WEST BROMWICH.—Erection of three nine-storey blocks of flats (108 dwellings) at Ebenezer-st./Dial-la./Spon-la. for CBC. Designed by Wates Architectural Dept. (Chief A. K. W. Bland) in conjunction with G. F. Elliott. (A) Wates Ltd., £264,646.

WESTON-SUPER-MARE. — Erection of factory, with two-storey offices, for Alumin Building Components Ltd. R. H. Gallannaugh & Ptnrs., architects. (A) W. E. Chalke & Co. Ltd., £63,697. New factory for C. H. Hare & Son Ltd. R. H. Gallannaugh & Ptnrs., architects. (A) Staverton Contrs. Ltd., £78,405. New factory for Fox Bros. & Co. Ltd. R. H. Gallannaugh & Ptnrs., architects. (A) J. Dyer & Son (Weston-super-Mare) Ltd., £31,435.

WEST RIDING.—Erection of sec. mod. sch. at Bruntcliffe for CC. (A) J. Miller & Ptnrs., £228,867.

WHYTELEAFE (Surrey). — New three-storey building for warehouse and offices for Givaudan & Co. Ltd. (A) Marshall Andrew & Co. Ltd., 31 Queen Annes Gate, London, SW1.

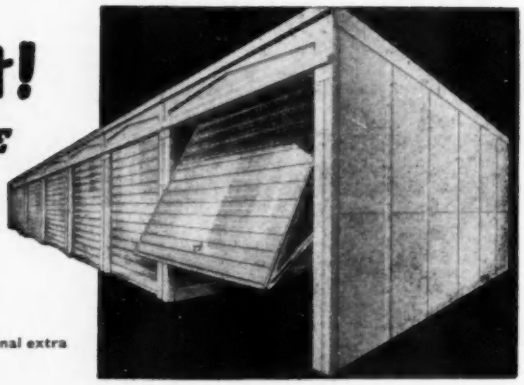
YEOVIL.—Erection of 42 houses, 12 old people's bungalows and six garages at Sunningdale estate for TC. (A) G. W. Taylor & Sons (Weymouth) Ltd., £100,000 (approx.).

Still unequalled for quality
and never a load late
BROAD-ACHESON
CELLULAR BLOCKS
BROAD & CO·LTD·PADDINGTON W2

FLOORINGS OF ALL KINDS
WOOD BLOCK-PARQUET CORK
SOLID T & G HARDWOOD STRIP
Stevens & Adams Ltd.
POINT PLEASANT·WANDSWORTH·S·W·18
TELEPHONE: VANdyke 6555/8

THE ESSEX STEEL SCAFFOLDING Co LTD
SALES, HIRE
ERECTION
CRADLES
SMARTS LANE
LOUGHTON ESSEX
TEL: LOUGHTON 5022

a solid investment!
BATLEY
MULTIPLE CONCRETE GARAGES
Provide an unequalled investment and permanent source of income. Ideal for Housing Estates, Public Utilities, Hotels, etc. Rentals will cover repayments under our attractive deferred terms scheme.
- Free Advisory Service
- 3 Years' Guarantee
- Hinged or Up & Over Doors
- Purchased by over 300 Councils
- Wooden roller shutter doors optional extra
- Extensive Free Delivery Area



Write for illustrated brochure to:-
ERNEST BATLEY LTD.,
66 Colledge Rd., Holbrooks, Coventry · 89245
Also 66 New Islington, Manchester 4 & 123 Shepperton Rd., London, N·1.

OFFICIAL ANNOUNCEMENTS

Rate : 30/- per inch, minimum ½-inch ; each additional line 2/- Competitions Contracts Public Appointments

ATTENTION ADVERTISERS

Classified advertisements in this section can be accepted up to 12 o'clock noon on the TUESDAY prior to issue. It is regretted that advertisements cannot be accepted by telephone.

CONTRACTS

HAMPSHIRE
COUNTY COUNCIL.

URBAN DISTRICT COUNCIL OF HAVANT AND WATERLOO.
HEALTH CLINIC, COMMUNITY CENTRE AND AMBULANCE STATION,
LEIGH PARK, HAVANT.

TENDERS are invited from suitable firms on a FIXED PRICE BASIS for the first phase (FOUNDATION AND DRAINAGE WORK) of this Contract. Contractors tendering for the first phase will be invited to tender for the superstructure work which comprises the second phase.

Applications for Tender documents, accompanied by a deposit of two guineas payable by cheque to "Hampshire County Council," should be sent to the Clerk of the County Council by the 8th MARCH, 1961. The deposit will be refunded on receipt of a bona fide Tender or the return of the documents.

Tender documents will be available on the 10th March, 1961, and Tenders must be delivered to the Clerk of the County Council by not later than 12 NOON on the 30th MARCH, 1961.

The two Authorities do not bind themselves to accept the lowest or any Tender or to award the contract for Phase 2 to the successful tenderer for Phase 1.

G. A. WHEATLEY,
Clerk of the County Council.

The Castle,
Winchester.

B. R. W. GOFTON,
Clerk of the Urban District Council.

CHESHAM
URBAN DISTRICT COUNCIL.

EXTERIOR PAINTING OF COUNCIL DWELLINGS.

The above-named Council invite TENDERS for the EXTERIOR PAINTING OF 256 COUNCIL DWELLINGS AND A COMMUNITY ROOM, and Contractors may Tender for one or more of the seven groups into which these properties have been arranged.

The Conditions of Contract, Specification, and Form of Tender may be obtained from the Council's Housing Manager, Mr. L. D. Saturley, Cert. S.I.B. A.I.Hsg., M.A.P.H.I., at the Council Offices, Chesham, Bucks, on payment of £1 1s. 0d. which will be refunded upon receipt of a bona fide Tender and the return of the documents.

Tenders should be enclosed in plain sealed envelopes marked "Exterior Painting—Council Dwellings," and should reach the undersigned by midday on MONDAY, 13th MARCH, 1961.

The Council do not bind themselves to accept the lowest or any Tender.

W. I. NASH,
Clerk of the Council.

Council Offices,
Chesham,
Bucks.

NEWCASTLE UNDER LYME
BOROUGH.

BOROUGH SURVEYOR'S DEPARTMENT.

Fixed price TENDERS are invited for the PROPOSED ERECTION OF ONE THREE-STOREY BLOCK CONTAINING 12 SHOPS WITH FLATS AND MAISONETTES OVER.

The construction generally is traditional with brick walls, concrete floors and boarded flat roof.

Contractors wishing to Tender upon bills of quantities, should submit their names, accompanied by a cheque for £2 to the Borough Surveyor, Lancaster Building, High-street, Newcastle, Staffs, not later than the 8th MARCH. Cheques should be made payable to the Borough of Newcastle under Lyme.

The deposit will be returned upon receipt of a bona fide Tender, or if the documents are returned un-used before the date for receipt of Tenders.

C. J. MORTON,
Town Clerk.

UXBRIDGE
BOROUGH.

EXTERNAL PAINTING CONTRACTS.

TENDERS are invited for the EXTERNAL PAINTING OF HOUSES in the following groups:—

Contract No. 101. Uxbridge.	72	HOUSES.
Contract No. 102. Uxbridge.	116	HOUSES.
Contract No. 103. Cowley.	82	HOUSES.
Contract No. 104. Ickenham.	74	HOUSES.
Contract No. 105. Hillingdon.	132	HOUSES.
Contract No. 106. Hillingdon.	68	HOUSES.

Specification, Bills of Quantities and Form of Tender may be obtained from A. W. Caudery, M.R.S.H., A.I.Hsg., Housing Manager, 267 High street, Uxbridge, Middlesex, on receipt of a deposit of £2 2s. to be returned on receipt of a bona fide Tender.

Tenders may be submitted for one or more contracts and must be returned in the envelope provided, endorsed "Tender for External Painting," bearing no other mark or indication of the sender.

Tenders must reach the undersigned not later than NOON on SATURDAY, 18th MARCH, 1961.

The Council do not bind themselves to accept the lowest or any Tender.

E. RONALD WEST,
Town Clerk.

265 High-street,
Uxbridge.

KIDDERMINSTER
BOROUGH.

TRADITIONAL HOUSING PROGRAMME
TYPE "A." CONTRACT "1."
HABBERLEY.

TENDERS are invited on a FIXED PRICE BASIS for the above work comprising the CONSTRUCTION OF 30 DWELLINGS AND SITEWORKS THERETO.

Specification, Bills of Quantity and Form of Tender may be obtained from J. G. Stewart, Esq., M.I.C.E., M.Inst.Mun.E., M.I.W.E., Borough Engineer and Surveyor, 110 Mill-street, Kidderminster, and Conditions of Contract and Drawings may be inspected at the above office on a payment of a deposit of £2 which is returnable on receipt of a bona fine Tender not subsequently withdrawn.

Tenders are to be delivered in the envelope provided endorsed "A.163/17/3," to reach the Town Clerk, Town Hall, Kidderminster, not later than 12 NOON, FRIDAY, 17th MARCH, 1961.

J. L. EVANS,
Town Clerk.

Town Hall,
Kidderminster.
14th February, 1961.

REIGATE
BOROUGH.

14 DWELLINGS,
WELTON FLOWER GARDENS
(LAND ADJOINING SPEEDWELL HOUSE), LONDON-ROAD, REDHILL.

FIXED-PRICE TENDERS are invited for TWO PAIRS OF 3-BEDROOM HOUSES, ONE BLOCK OF 6 3-STOREY, TWO-BEDROOM FLATS AND ONE BLOCK OF 4 OLD PEOPLE'S FLATLETS, based upon Bills of Quantities for substructure and site works, subject to remeasurement as work proceeds, and upon lump sum for superstructure of the dwellings based upon Specification and Detailed Plans.

Form of Tender, Specification, Bills of Quantities and Plans obtainable from the Borough Engineer and Surveyor, Town Hall, Reigate, on payment of a deposit of £2 2s., refunded upon the submission of a bona fide Tender or the return of all Plans and documents.

Sealed Tenders, in the envelope provided and endorsed "Tender for 14 Dwellings, Welton Flower Gardens, Redhill," must be returned to the undersigned not later than noon on THURSDAY, 23rd MARCH, 1961.

(Signed) HEBER DAVIES,
Town Clerk.

Town Hall,
Reigate.
February, 1961.

PENZANCE
BOROUGH.

PROPOSED INFORMATION BUREAU.

TENDERS will shortly be invited from selected contractors for the ERECTION OF AN INFORMATION BUREAU on a site opposite the Municipal Buildings.

Contractors who are experienced in this type of work and who wish to be invited to tender should send their names to the Borough Engineer and Surveyor, Municipal Buildings, Penzance, by 14th MARCH, 1961.

E. O. WHEALE,
Town Clerk.

Municipal Buildings,
Penzance.
25th February, 1961.

STAINES
URBAN DISTRICT COUNCIL.

TOWN-LANE, STANWELL, MIDDLESEX.
ERECTION OF 44 DWELLINGS AND 40 GARAGES—SECTIONS H. I. K AND L.

FIXED PRICE TENDERS are invited for the ERECTION OF ONE THREE-STOREY BLOCK CONTAINING FIVE FLATS AND TEN MAISONETTES, ONE THREE-STOREY BLOCK CONTAINING THREE FLATS AND SIX MAISONETTES, TEN PAIRS OF SEMI-DETACHED HOUSES AND 40 GARAGES.

Bill of Quantities and Forms of Tender will be available on the 7th March, 1961, and will be forwarded to the Applicants on receipt of a deposit of £2 2s. returnable upon the submission of a bona fide Tender not subsequently withdrawn and the return of all documents.

Tenders are to be returned in plain sealed envelopes endorsed "Tender H-L, Town-lane, Stanwell," to the undersigned not later than 5 p.m. on TUESDAY, 28th MARCH, 1961.

The Council does not bind itself to accept the lowest or any Tender.

F. ENTWISTLE,
Clerk of the Council.

"Elmsleigh,"
73 High-street,
Staines,
Middlesex.

WHITWORTH
URBAN DISTRICT COUNCIL.

ERECTION OF DWELLINGS.

FIXED PRICE TENDERS are invited for the ERECTION OF 36 UNITY TRADITIONAL DWELLINGS IN THREE-STOREY CONSTRUCTION, COMPRISING 19 MAISONETTES AND 17 FLATS, together with ROADS AND ANCILLARY SITE WORKS, at Moss Side-street, Shawforth, Near Rochdale.

Forms of Tender, Bills of Quantities, etc., may be obtained from the Engineer and Surveyor, Council Offices, Whitworth, Near Rochdale, on payment of a deposit of Two Guineas, which will be refunded on receipt of a bona fide Tender. Drawings are available for inspection at the Council Offices.

Tenders, sealed in the envelopes provided, must be received by me not later than 18th MARCH, 1961.

The lowest or any Tender will not necessarily be accepted.

E. R. CRAWSHAW,
Clerk of the Council.

Council Offices,
Whitworth,
Near Rochdale.

WING
RURAL DISTRICT COUNCIL.

TENDERS are invited for the CONSTRUCTION of approximately 1,900 square yards of TARMACADAM CARRIAGEWAY, 1,000 square yards of TAR PAVED FOOTPATHS, 230 yards run of SURFACE WATER DRAINS, and 350 yards run of SEWER DRAINS at Littleworth, Wing, Bucks.

Bills of Quantities and Forms of Tender may be obtained from the Council's Architect, Mr. H. A. Rolls, Chartered Architect, of 15 Bridge-street, Leighton Buzzard, on payment of a deposit of £2 2s. returnable on receipt of a bona fide Tender or the return of the documents. Cheques must be made payable to "Wing Rural District Council."

Drawings may be examined at the office of the Architect.

Tenders in plain sealed envelopes, endorsed "Tender for Road Works, etc., Littleworth," must be delivered to the undersigned by FIRST POST on MONDAY, 27th MARCH, 1961.

The Council do not bind themselves to accept the lowest or any Tender.

K. F. YOUNG,
Clerk of the Council.

Brooklands,
Linslade,
Leighton Buzzard.

ILFORD
BOROUGH.

GEARIES INFANTS' AND JUNIOR SCHOOLS.
NEW INFANTS' ASSEMBLY HALL AND EXTENSION TO JUNIOR HALL.

The Corporation invites TENDERS for these works.

Forms of Tender, Bills of Quantities and Drawings may be obtained from the Borough Engineer, Town Hall, Ilford, upon written application and payment of a deposit of £2 2s. which will be returned on receipt of a bona fide Tender, not subsequently withdrawn, and all documents issued. Conditions of Contract may be inspected at the Borough Engineer's office.

Tenders, in plain sealed envelopes endorsed "Tender for Extensions to Gearies School," but not bearing any name or mark indicating the sender, must be delivered to the Town Clerk, Town Hall, Ilford, not later than 4 p.m. on TUESDAY, 28th MARCH, 1961. Priced Bills of Quantities must be returned at the same time as the Tender in the special envelope provided.

JARROW
BOROUGH.

HOUSING SUPPLIES 1961-62

The Council invite applications from suppliers and contractors who wish to be placed on the list of approved contractors to whom invitations to TENDER FOR THE SUPPLY OF MATERIALS AND SERVICES will be issued during the 12 months ending 31st MARCH, 1962, as and when schemes are initiated.

Applications should be addressed to the Borough Engineer, Town Hall, Jarrow, stating for which of the following goods or services the applicant wishes to Tender.

Tenders will be invited at various periods throughout the year.

(1) WINDOWS.
(2) DOORS.
(3) STAIRCASES.
(4) WOOD WOOL SLABS, OR EQUIVALENT.
(5) CONCRETE FLOORING.
(6) FELT ROOFING.
(7) ROOFING TILES (SUPPLY OF).
(8) RAINWATER GOODS AND SOIL PIPES.
(9) COPPER PIPES AND FITTINGS.
(10) DOMESTIC HOT WATER BOILERS, RADIATORS, ETC.
(11) SANITARY FITTINGS.
(12) TILED FIREPLACES.
(13) THERMOPLASTIC OR ASPHALT FLOORING.
(14) ELECTRICAL MATERIALS (SUPPLY OF).
(15) HALDWARE
(16) MECHANICAL HAULAGE (WORKING WITH EXCAVATOR).

M. L. ROTHFIELD,
Town Clerk.

CHELMSFORD
BOROUGH.

MEADGATE SCHEME 3.
ERECTION OF 56 HOUSES.
24 FLATS AND 85 GARAGES.

FIXED-PRICE TENDERS are invited for the ERECTION of the above buildings which are comprised in two contracts:

Contract 1: 29 HOUSES, 51 GARAGES.
Contract 4: 27 HOUSES, 24 FLATS, 34 GARAGES.

Specification, Bill of Quantities and Forms of Tender may be obtained from the Borough Engineer on payment of a deposit of two guineas in respect of each contract. The deposit will be returned on receipt of a bona fide tender not subsequently withdrawn together with the return of all documents supplied. Cheques should be made payable to Chelmsford Corporation. Drawings may be inspected at the Borough Engineer's Office. Tenders are to be returned to the undersigned by noon on the 23rd MARCH, 1961. Bills of Quantities are to be returned to the Borough Engineer by noon on the same day. The Council do not bind themselves to accept the lowest or any tender.

B. A. FRANCIS,
Town Clerk.

LITTLEHAMPTON
URBAN DISTRICT COUNCIL.

NEW PAVILION-ON-THE-GREEN.

Applications are invited from Building Contractors who wish to TENDER for the REMOVAL OF THE EXISTING TIMBER BUILT PAVILION AND THE CONSTRUCTION OF A NEW SINGLE-STOREY BUILDING COMPRISING: A COMBINED RESTAURANT AND CONCERT HALL WITH STAGE, 125 ft. by 45 ft.; MAIN KITCHEN BLOCK, 26 ft. by 45 ft. with BASEMENT STORE; AND STORES, ENTRANCE FOYER, CONVENIENCES AND DRESSING ROOM ACCOMMODATION.

Tender documents will be forwarded at the end of March, 1961, and the closing date for Tenders will be TUESDAY, 25th APRIL, 1961.

Applications should be sent to the Engineer and Surveyor, not later than TUESDAY, 14th MARCH, 1961, and must be accompanied by a deposit of £3 3s., which will be returned on receipt of a bona fide Tender.

The Council do not bind themselves to accept the lowest or any Tender.

D. WILLOUGHBY,
Clerk of the Council.

Council Offices,
Littlehampton,
Sussex.
Februray, 1961.

WIMBLEDON
BOROUGH.

PAINTING OF STREET LIGHTING STANDARDS, ETC.

TENDERS are invited for the painting of approximately

151 No. 25 foot STANDARDS
607 No. 15 foot STANDARDS
75 No. Miscellaneous BRACKETS AND FITTINGS.

Apply Borough Surveyor, Town Hall, Wimbledon, S.W.19, by 8th MARCH, 1961, for Tender documents. Two guineas deposit refundable on receipt of a bona fide Tender or return of documents.

SHREWSBURY
BOROUGH.

PUBLIC CONVENIENCES—ST. ALKMUND'S-SQUARE.

TENDERS are invited for a FIXED PRICE contract for the CONSTRUCTION OF UNDERGROUND PUBLIC CONVENIENCES at St. Alkmund's-square, Shrewsbury.

Drawings, specifications, bills of quantity, and form of tender may be obtained from and conditions of contract may be seen during office hours at the office of the Borough Surveyor, Guildhall, Shrewsbury, on or after 6th MARCH, 1961, on payment of £2 2s. which will be returned on receipt of a bona fide Tender and the remaining documents.

Tenders on the prescribed form, sealed in the envelope provided, and bearing no mark of identification, are to be received by the undersigned not later than 10 a.m. on MONDAY, 20th MARCH, 1961.

The Council do not bind themselves to accept the lowest or any other Tender.

S. R. H. LOXTON,
Town Clerk.

Guildhall,
Shrewsbury.
February, 1961.

STRATFORD-UPON-AVON
BOROUGH.

ERECTION OF 16 FLATS AND 18 HOUSES AT MASONS-ROAD ESTATE, STRATFORD-UPON-AVON. CONTRACT 10E.

TENDERS are invited from experienced Building Contractors for the ERECTION OF TWO BLOCKS OF EIGHT FLATS AND EIGHTEEN HOUSES at Masons-road Estate, Stratford-upon-Avon.

The contract will be a "Fixed Price Contract."

Tender documents are obtainable from and drawings may be inspected during normal office hours at the office of the undersigned upon payment of two guineas which will be returned on receipt of a bona fide Tender.

Tenders must be delivered to the Town Clerk, Town Clerk's Office, Municipal Offices, Stratford-upon-Avon, not later than NOON on MONDAY, 20th MARCH, 1961.

The Council do not bind themselves to accept the lowest or any Tender.

P. C. SMART,
M.I.C.E., M.I.Mun.E.,
Borough Engineer and Surveyor.

Borough Engineer's Office,
Municipal Offices,
Stratford-upon-Avon.
22nd February, 1961.

CHADDERTON
URBAN DISTRICT COUNCIL.

Fixed price TENDERS are invited for the ERECTION OF PUBLIC CONVENIENCES AND ELECTRICITY SUBSTATION at Wallis-street, Butler-green.

Conditions of Contract, Specifications, Bills of Quantities and Form of Tender, etc., may be obtained from, and plans inspected at, the office of the Engineer and Surveyor, Town Hall, Chadderton, on payment of a deposit of £2 2s. 0d. which will be refunded on receipt of a "bona fide" Tender.

Tenders, in plain sealed envelopes, endorsed "Tender for Public Conveniences and Electricity Substation" to be received by the undersigned by the 20th MARCH, 1961.

L. STOTT,
Clerk of the Council.

Town Hall,
Chadderton.

SURREY
COUNTY COUNCIL.

TENDERS FOR NEW COUNTY PRIMARY SCHOOL AT LEATHERHEAD, BELL-LANE, FETCHAM.

The work consists of the ERECTION OF A TWO-STOREY EIGHT-CLASSROOM PRIMARY SCHOOL, together with SINGLE-STOREY ASSEMBLY HALL, KITCHEN, SANITARY ACCOMMODATION, SITE WORKS, etc.

Contractors wishing to tender for the above works should apply to the County Architect, County Hall, Kingston-upon-Thames, by 9th MARCH, 1961.

HEMEL HEMPSTEAD
BOROUGH.

CUPID GREEN DEPOT. ALTERATIONS AND ADDITIONS.

The Corporation invite TENDERS for ALTERATIONS AND ADDITIONS TO THEIR WORKS DEPOT, Cupid Green, Hemel Hempstead, comprising the following:

(a) NEW STAFF HOUSE.
(b) NEW SINGLE-STOREY ADMINISTRATIVE BLOCK.
(c) ALTERATIONS TO PROVIDE WELFARE FACILITIES.
(d) ANCILLARY WORKS.

Tender documents may be obtained from A. R. Turner, A.M.I.C.E., Borough Engineer and Surveyor, High-street, Hemel Hempstead, at whose office, drawings and conditions of contract may be inspected during normal working hours.

Tenders in the envelope provided, must be delivered to me not later than 12 noon on TUESDAY, 28th MARCH, 1961.

The Corporation do not bind themselves to accept the lowest or any tender and acceptance of a tender will be subject to its approval by the Ministry of Housing and Local Government.

C. W. G. T. KIRK,
Town Clerk.

Town Hall,
High-street,
Hemel Hempstead.

EAST GRINSTEAD
URBAN DISTRICT COUNCIL.

EXTERNAL PAINTING, FENCING WORKS.

FIXED-PRICE TENDERS are invited for:

(a) EXTERNAL PAINTING OF 160 DWELLINGS at four sites sub-divided into groups of 99, 36 and 25, and also internal redecoration works at Council Offices, East Court. Contractors may tender for the whole or one or more of the four groups.

(b) PROVISION OF 132 YDS. OF 4-FT. HIGH CONCRETE POST AND CHAIN LINK FENCE ENCLOSURE incorporating 2 No. 3 ft. 6 in. width oak palisade gates at Moat Pond, King George's Field, also 187 yards of 6 ft. high concrete post and chain link fencing incorporating 1 No. 12 ft. width two-leaf W.I. mesh infilled gate at Durkins-road Depot.

General Conditions, Specification and Form of Tender, obtainable from Mr. B. J. Cornelius, F.R.I.C.S., Surveyor to the Council, at the undermentioned address upon receipt of a cheque for Two Guineas made payable to the Council for each of the documents (a) or (b) above. Tender deposits refunded on receipt of bona fide tenders and the return of the whole of the documents.

Tenders returnable by NOON on SATURDAY, 18th MARCH, 1961, to the undersigned in the envelope provided.

The Council does not bind itself to accept the lowest or any tender and reserves the right to accept separate tenders for each group in each section.

H. C. JONES,
Clerk of the Council.

East Court,
East Grinstead,
Sussex.

LINDSEY
COUNTY COUNCIL.

EDUCATION COMMITTEE.

TENDERS are invited for the ERECTION AND COMPLETION OF STAGE 3, COMPRISING A FLOOR AREA OF ABOUT 4,442 SQUARE FEET, OF THE TATTERSHALL GARTREE SECONDARY SCHOOL, Coningsby, Lincolnshire.

Bills of Quantities and Forms of Tender may be obtained from the Architects Clarke Hall, Scorer and Bright, F./A.R.I.B.A., 200 High-street, Lincoln, to whom application should be made not later than 8th March, 1961.

Plans may be inspected at the County Offices, Lincoln and at the architects' office at the above address.

Tenders must reach the undersigned by 10 a.m. on WEDNESDAY, 5th APRIL, 1961 in the official envelope which must bear no indication of the sender's identity. The County Council does not bind itself to accept the lowest or any Tender.

F. J. BIRKBECK,
Director of Education.

County Offices,
Lincoln.

CITY OF PORTSMOUTH

Tenders, on Bill of Quantities, are invited for the Alterations and Improvements at a large Home for Aged Persons at St. Mary's House.

Contractors should apply for documents to Messrs. Clayton, Black and Petch, 25 Landport Terrace, Portsmouth, not later than 13th March, 1961, enclosing a deposit of £1, which will be refunded on receipt of a bona-fide tender or the return of all the documents within three days.

The Council do not bind themselves to accept the lowest or any tender. It is a condition of tendering that the Contractor shall, at the date of his tender, have in his employment not less than one indentured apprentice to every eight craftsmen who were employed by him on the previous 1st January.

BIRMINGHAM CITY.

STRUCTURAL STEELWORK.

The Public Works Committee invite TENDERS on a fixed-price basis for a measure and value contract for the SUPPLY AND ERECTION on prepared foundations OF APPROXIMATELY 107 TONS OF FABRICATED STEELWORK, of which 85 tons is in WELDED TUBULAR LATTICE GIRDERS AND COLUMNS, for a Mechanical and Public Lighting Depot at Cardigan-street, Birmingham, 4.

The Conditions of Contract (which include the Corporation's usual Fair Wages and Conditions of Labour Clause) and the Drawings may be inspected and the Specification, Bills of Quantities and Form of Tender obtained on payment of £2 2s. at the office of Sir Herbert Manzoni, City Engineer and Surveyor, Civic Centre, Birmingham, 1, to whom all cheques should be made payable. The deposit will be returned on receipt of a bona fide tender.

Tenders enclosed in the envelope provided for the purpose must be sealed and delivered to the Town Clerk's Office (Room No. B21) not later than NOON on TUESDAY, 14th MARCH, 1961, when they will be opened. Tenders received after that time will be rejected.

The Committee do not bind themselves to accept the lowest or any tender.

T. H. PARKINSON,
Town Clerk.

Council House,
Birmingham, 1.

BIRMINGHAM CITY
HOUSING MANAGEMENT DEPARTMENT.

CLEFT CHESTNUT FENCING.

The Housing Management Committee of the Birmingham Corporation invite TENDERS for the SUPPLY AND DELIVERY OF APPROXIMATELY 100,000 YDS. OF 3 FT. CLEFT CHESTNUT FENCING, 11,000 YDS. OF 3 FT. 6 IN. CLEFT CHESTNUT FENCING AND 45,000 POSTS, to be supplied during the twelve months commencing the 1st MAY, 1961.

The attention of persons submitting tenders is drawn to the following points:

1. Delivery will be required in twelve equal monthly instalments, but deliveries can, if it suits the supplier, be made in advance.

2. Tenders may be accepted for quantities less than the total amount specified, but such tenders must be for not less than 20,000 yds. of fencing and 6,000 posts.

Forms of tender can be obtained from the undersigned and should be returned by the 22nd MARCH, 1961.

J. P. MACEY,
Housing Manager.

Housing Management Department,
Bush House,
Broad-street,
Birmingham, 1.

DAGENHAM
BOROUGH.

VALENCE PRIMARY SCHOOL, KITCHEN.

TENDERS are invited for the CONVERSION OF CLASSROOMS TO A KITCHEN for 200 meals at the above school, in Bonham-road, Dagenham.

Drawings and General Conditions of Contract may be inspected during normal office hours.

Bills of Quantities are obtainable from the Borough Surveyor on payment of £2 2s., refundable on receipt of bona fide tender delivered to the undersigned by noon, THURSDAY, 23rd MARCH, 1961.

The Council do not bind themselves to accept the lowest or any tender.

KEITH LAUDER,
Town Clerk.

Civic Centre,
Dagenham.

WEST SUSSEX
COUNTY COUNCIL.

Contractors wishing to submit a FIXED PRICE TENDER for the undermentioned scheme, are invited to apply for permission to tender; such applications to be addressed to the County Architect, County Hall, Chichester, to reach him not later than 15th MARCH, 1961.

EXTENSIONS AND MODIFICATIONS TO EXISTING BUILDINGS at Cameisdale Primary School, Nr. Haslemere. (Job No. 6130.)

Quantities will be issued on or about 20th MAY, 1961.

The County Council does not bind itself to accept the lowest or any Tender, and the firm whose Tender is accepted must be prepared to enter into a contract in a form to be prepared by me.

T. C. HAYWARD,
Clerk of the County Council.

County Hall,
Chichester.

STEPNEY M.B.C.

RATCLIFFE HOUSE HOUSING SCHEME.

TENDERS are invited for the SUPPLYING AND LAYING OF SEMTEX THERMOPLASTIC TILES in the 20 dwellings being erected at this Scheme.

Forms of tender, with conditions, etc., obtainable from the Borough Engineer and Surveyor, Municipal Offices, 227-233 Commercial-road, E.1.

Closing date for Tenders—NOON, MONDAY, 13th MARCH, 1961.

WILFRED REEVE,
Town Clerk.

ESHER
URBAN DISTRICT COUNCIL.

ERECTION OF 14 DWELLINGS AND 31 GARAGES, UPPER FARM ESTATE, WEST MOLESEY CONTRACT NO. 294.

The Council is prepared to receive TENDERS for the ERECTION OF 14 TWO-STOREY TWO-BEDROOM HOUSES IN SEVEN PAIRS and 31 BRICK-BUILT GARAGES IN TWO BLOCKS (ONE OF 15 and ANOTHER OF 16).

Form of Tender, Drawings, Specification for all the Works and Bill of Quantities for work below dampproof course level and external works and services may be obtained from the Engineer and Surveyor and Planning Officer, Council Offices, Esher, on payment of a deposit of two guineas which will be refunded on receipt of a bona fide Tender together with the return of all documents in good condition.

Tenders on the prescribed form, enclosed in the envelope provided, endorsed "Contract No. 294" and bearing no name or mark indicating the sender, must be addressed to and received by the undersigned not later than 5 p.m. on MONDAY, 27th MARCH, 1961.

The Council does not bind itself to accept the lowest or any Tender received.

FREDERICK EVANS,
Clerk of the Council.

Council Offices,
Esher,
Surrey.

MORECAMBE AND HEYSHAM
BOROUGH.

PRIVATE GARAGES—POULTON HALL COACH PARK.

TENDERS are invited for the ERECTION OF ONE BLOCK OF EIGHT GARAGES ON THE CORPORATION COACH PARK, Poulton Hall.

Plans and Specification may be obtained at the office of the Borough Engineer and Surveyor upon payment of a deposit of £1 returnable upon receipt of a bona fide Tender not subsequently withdrawn.

The Council does not bind itself to accept the lowest or any Tender.

Tenders endorsed "Garages—Poulton Hall" must reach me by 9 a.m. FRIDAY, 7th APRIL, 1961.

C. E. BOTTOMLEY,
Town Clerk.

MAIDENHEAD
BOROUGH.

CORPORATION DEPOT BUILDINGS, BRAYWICK-ROAD.

The Council invites firm price TENDERS for the ERECTION OF EXTENSIONS TO THE EXISTING CORPORATION DEPOT BUILDINGS, COMPRISING LARGE GARAGE WITH FIRST FLOOR PAINTERS' SHOP AND A VEHICLE MAINTENANCE WORKSHOP.

Specification, drawings and Form of Tender may be obtained from and Conditions of Contract may be seen at the office of the Borough Engineer and Surveyor, 14 Craufurd-rise, Maidenhead, on payment of Two Guineas deposit which will be refunded on receipt of a bona fide Tender or the return of all documents.

Tenders on the prescribed form, in sealed envelopes (provided) endorsed "Corporation Depot Buildings" and bearing no mark or indication of sender must be delivered to me not later than THURSDAY, 30th MARCH, 1961.

The Council does not bind itself to accept the lowest or any Tender.

STANLEY PLATT,
Town Clerk

Guildhall,
Maidenhead,
Berkshire.
March, 1961.

WEST SUSSEX
COUNTY COUNCIL.

Contractors wishing to submit a FIXED PRICE TENDER for the undermentioned scheme, are invited to apply for permission to tender; such applications to be addressed to the County Architect, County Hall, Chichester, to reach him not later than 13th MARCH, 1961.

ERECTION OF SINGLE BAY FIRE STATION at Partridge Green (Job No. 6810).

Quantities will be issued on or about 27th April, 1961.

The County Council does not bind itself to accept the lowest or any Tender and the firm whose Tender is accepted must be prepared to enter into a contract in a form to be prepared by me.

T. C. HAYWARD,
Clerk of the County Council.

County Hall,
Chichester.

CARLISLE CITY.

ERECTION OF MORTON INFANTS' SCHOOL, CARLISLE.

TENDERS are invited for the above which consists of the ERECTION OF A SIX-CLASSROOM INFANTS SCHOOL AND EXTERNAL WORKS. A two-classroom block has to be completed for occupation for SEPTEMBER, 1961.

Tender documents may be had from the City Surveyor, 18 Fisher-street, Carlisle.

Closing date for tenders, 21st MARCH, 1961.

H. D. A. ROBERTSON,
Town Clerk.

SUS
PEN
DED CEILINGS

If you want to know about Suspended Ceilings you should know about Paramount Insulating Plasterboard. How to use it . . . what it does . . . what it offers — and the modern refinements such as plastic facing for coloured, brighter ceilings. In fact, there's some interesting literature on the subject. Send for your copy NOW !

THE BRITISH PLASTER BOARD (MANUFACTURING) LIMITED

Ferguson House, 15-17 Marylebone Road, London, N.W.1 Telephone: HUNter 4021

AP221

Steelwork ***by Boulton and Paul***

Projects develop according to plan when you call in Boulton and Paul. You have the skill and experience of specialists at your disposal, enthusiastic co-operation from start to finish and the employment of the most advanced techniques. Top quality materials are matched by fine craftsmanship. Maximum speed and economy are ensured by up-to-date mechanised fabrication.

Boulton and Paul Limited · **NORWICH** · LONDON · BIRMINGHAM

CE43

PORTSMOUTH CITY.

HOUSING DEPARTMENT.
MODERNISATION OF HORNDEAN HOUSE (19 FLATS) LANDPORT.

TENDERS are invited for this work. Applications for Tender documents should be sent to the Director of Housing, 1 Clarence-parade, Southsea, not later than 17th MARCH, 1961, with a deposit of £1, returnable upon receipt of bona fide Tenders or return of all documents WITHIN THREE DAYS.

The Council do not bind themselves to accept the lowest or any Tender. It is a condition of Tendering that the Contractor shall at the date of Tender have in his employment not less than one indentured apprentice to every eight craftsmen who were employed by him on the previous 1st January.

J. R. HASLEGRAVE,
Town Clerk.

ESSEX.
COUNTY COUNCIL.

HARWICH
SIR ANTHONY DEANE COUNTY SECONDARY SCHOOL.
ADDITIONAL CLASSROOMS AND ADAPTATIONS.

Contractors wishing to TENDER for the above should forward their names, from which a panel will be chosen and provided with tender documents.

The work consists of additional classrooms in traditional construction and adaptations to provide a general purposes room, etc., estimated cost £15,234. The private architects for this contract are Johns, Slater and Haward, Foundation-street, Ipswich.

Applications to reach the undersigned not later than 11th MARCH, 1961.

H. CONOLLY, C.B.E., F.R.I.B.A.,
County Architect.

County Hall,
Chelmsford.

ISLE OF ELY
COUNTY COUNCIL.

WISBECH: NORWICH-ROAD.
NEW POLICE HOUSES AND FAMILY GROUP HOME.

Firm price TENDERS are invited from Building Contractors for either or both of the following projects, to be erected on adjoining sites:—

(a) ONE PAIR OF POLICE HOUSES IN TRADITIONAL CONSTRUCTION each having a floor area of approximately 960 feet super.

(b) A FAMILY GROUP HOME IN TRADITIONAL CONSTRUCTION, having a total floor area of approximately 2,500 feet super.

Tender documents will be available in late March.

The last date for receipt of Tenders will be 24th APRIL, 1961.

Contractors wishing to Tender should submit their names to the County Architect, County Hall, March, together with a cheque for £2 2s. 0d. in respect of each project, payable to the Isle of Ely County Council by not later than 18th MARCH, 1961. The deposit will be returned upon receipt of a bona fide Tender.

R. F. G. THURLOW,
Clerk of the County Council.

County Hall,
March.

SOUTHWICK
URBAN DISTRICT COUNCIL.

(A) STATION-ROAD/ROCK-ROAD, and (B) FISHERGATE NO. 2, PART II, DEVELOPMENT SCHEMES.

Building Contractors who wish to be considered for invitation to submit FIXED-PRICE TENDERS FOR THE ERECTION OF: (A) TWO FOUR-STOREY BLOCKS OF FLATS containing 20 flats in each block; and (B) THREE THREE-STOREY BLOCKS OF FLATS containing 6 flats in each block and ONE FOUR-STOREY BLOCK containing 16 flats, in connection with the above-named schemes, are asked to register their names with me by not later than SATURDAY, 11th MARCH, 1961.

Tender documents in respect of Scheme (A) will be available for issue on MONDAY, 29th MAY, 1961, and the closing date for submission of tenders will be MONDAY, 26th JUNE, 1961. The documents in respect of Scheme (B) will be available for issue on 27th MARCH, 1961, and the closing date for submissions of tenders will be 24th APRIL, 1961.

Plans of the Schemes are available for inspection at this office at any time during normal office hours.

The Council reserve the right to issue invitations to tender only to those building contractors selected by them for that purpose.

A. R. SHOTT,
Clerk of the Council.

Town Hall,
Southwick,
Sussex.

CAMBRIDGE CITY.

ARBURY-ROAD ESTATE (NORTH).
CONTRACT 109.

FIXED PRICE TENDERS are invited for the ERECTION OF 59 HOUSES of one type in the above Contract. Applications (deposit 2 guineas) to City Surveyor, The Guildhall, Cambridge, by 11th MARCH. Tenders due 10th APRIL, 1961.

The Council do not bind themselves to accept the lowest or any Tender.

ALAN H. I. SWIFT,
Town Clerk.

The Guildhall,
Cambridge.

STAINES
URBAN DISTRICT COUNCIL.

PROPOSED SPORTS PAVILION, LONG-LANE, STANWELL.

TENDERS are invited from suitably qualified contractors for the CONSTRUCTION OF A SPORTS PAVILION at Long-lane, Stanwell.

Drawings, Specification and form of Tender may be obtained on application to the Engineer and Surveyor, Shortwood House, 240 London-road, Staines, Middlesex, on payment of a deposit of £2 2s., which will be returned on receipt of a bona fide tender, not subsequently withdrawn.

Conditions of contract may be inspected at the office of the Engineer and Surveyor by all persons who have made the necessary application to tender.

Tenders on the prescribed form in the envelope provided, endorsed, "Sports Pavilion," Stanwell, must be delivered at the office of the undersigned not later than 5 p.m., TUESDAY, 4th APRIL, 1961.

The Council does not bind itself to accept the lowest or any tender.

F. ENTWISTLE,
Clerk of the Council.

"Elmsleigh,"
73 High-street,
Staines,
Middx.

WANDSWORTH
METROPOLITAN BOROUGH.

ELECTRICAL WORKS.

Applications invited from those who desire to have their names placed on the Council's LIST of electrical contractors who may be invited to submit QUOTATIONS or TENDERS from time to time for the EXECUTION OF ELECTRICAL INSTALLATION WORKS.

Applications by letter, giving names of two technical and one financial referee, to reach me by 30th MARCH, 1961.

J. NOEL MARTIN,
Town Clerk.

Municipal Buildings,
Wandsworth, S.W.18.

STAINES
URBAN DISTRICT COUNCIL.

PROPOSED PUBLIC CONVENIENCES ASHFORD.

TENDERS are invited from suitably qualified contractors for the CONSTRUCTION OF PUBLIC CONVENIENCES, WOODTHORPE-ROAD, ASHFORD.

Drawings, Specification and form of Tender may be obtained on application to the Engineer and Surveyor, Shortwood House, 240 London-road, Staines, Middlesex, on payment of a deposit of £2 2s. 0d. which will be returned on receipt of a bona fide Tender, not subsequently withdrawn.

Conditions of contract may be inspected at the office of the Engineer and Surveyor by all persons who have made the necessary application to Tender.

Tenders on the prescribed form in the envelope provided, endorsed Public Conveniences, Ashford, must be delivered at the office of the undersigned not later than 5 p.m. TUESDAY, 4th APRIL, 1961.

The Council does not bind itself to accept the lowest or any Tender.

F. ENTWISTLE,
Clerk of the Council.

"Elmsleigh,"
73 High-street,
Staines,
Middlesex.

WEST RIDING
COUNTY COUNCIL.

EDUCATION DEPARTMENT.
GOOLE COUNTY DIVISION.

TENDERS are invited for PAINTING WORKS at Thorne Grammar School and Snaith Secondary School. Specifications and Tender forms, which must be returned to reach the undersigned by the 30th MARCH and 17th APRIL respectively, are obtainable from:—

H. CRABTREE,
Divisional Education Officer.

Goole.

WOLVERHAMPTON
COUNTY BOROUGH.

ERECTION OF HOME FOR AGED PERSONS, AND FLATLETS, BROADWAY, BUSHBURY.

TENDERS are to be invited for the undermentioned sub-contracts:—

(1) INSTALLATION OF ELECTRIC LIFT;
(2) METAL BALUSTRADING, SUPPLIED AND FIXED;
(3) HEATING, HOT AND COLD WATER INSTALLATION;
(4) ELECTRICAL INSTALLATION.

Contractors desiring to tender should write to the Borough Engineer, Town Hall, Wolverhampton, by WEDNESDAY, 15th MARCH, indicating the sub-contract for which application is made.

DURHAM
COUNTY COUNCIL.

TENDERS invited:—
STOCKTON-ON-TEES HOSTEL FOR AGED PERSONS—HEATING INSTALLATION.

Application for further details to County Architect, South-street, Durham, not later than 15th MARCH, 1961.

J. K. HOPE,
Clerk of the County Council.

Shire Hall,
Durham.

SALE
BOROUGH.

CONTRACT 1/1961—18 DWELLINGS.

Fixed price TENDERS are invited for the ERECTION OF THE ABOVE. Drawings may be inspected and Bills of Quantities and Form of Tender obtained from the Borough Engineer's Office, Town Hall, Sale, on payment of a £2 2s 0d. deposit.

Tenders must be delivered to the Town Clerk, Town Hall, Sale, in the envelope provided for that purpose, endorsed "Contract 1/1961—18 Dwellings" so as to reach him not later than 10 a.m. on MONDAY, 27th MARCH, 1961.

The Corporation does not bind itself to accept the lowest or any Tender.

BERTRAM FINCH,
Town Clerk.

Town Hall,
Sale.
March, 1961.

MONTGOMERYSHIRE
EDUCATION AUTHORITY.

TO BUILDING CONTRACTORS.

TENDERS are invited for the COMPLETION OF GUILSFIELD PRIMARY SCHOOL, near Welshpool. The works consist of the erection of two classrooms, small hall, kitchen, cloakrooms, etc., together with site works and drainage.

Plans and Bills of Quantities prepared by H. Carr, O.B.E., F.R.I.B.A., F.R.I.C.S., County Architect, can be obtained from the undersigned to whom Tenders in the envelope provided should be sent not later than noon on the 20th MARCH, 1961.

J. A. DAVIES,
Director of Education.

Education Offices,
Newton.
21st February, 1961.

LIVERPOOL CITY.

WORKS IN THE TRYWERYN VALLEY, MERIONETHSHIRE.
PERMANENT HOUSING.

TENDERS invited for BUILDING TWO SEMI-DETACHED HOUSES and TWO DETACHED BUNGALOWS at Frongoch.

Documents available from Water Engineer, 55 Dale-street, Liverpool, 2.

Tenders returnable 20th MARCH, 1961.

THOMAS ALKER,
Town Clerk

WEST RIDING OF YORKSHIRE
COUNTY COUNCIL.

TENDERS are invited for SITE WORKS AND THE ERECTION OF A HOSE DRYING AND DRILL TOWER at Cleckheaton Fire Station.

Plans and Specifications are available for inspection at the office of the Divisional Architect, Flint-street, Huddersfield, to whom applications to tender must be addressed.

Sealed Tenders must be addressed to me, the undersigned, and received at Room 4, County Hall, Wakefield, not later than 12 NOON on TUESDAY, the 14th MARCH, 1961.

BERNARD KENYON,
Clerk of the County Council.

ESSEX
COUNTY COUNCIL.

ST. OSYTHS TRAINING COLLEGE, CLACTON-ON-SEA.
SPORTS PAVILION.

Contractors wishing to TENDER FOR THE ERECTION OF THE ABOVE should forward their names, from which a panel will be chosen and provided with Tender documents.

The works will be in brick and timber traditional construction, estimated cost £7,250.

Applications to reach the undersigned not later than 11th MARCH, 1961.

H. CONOLLY, C.B.E., F.R.I.B.A.,
County Architect.

County Hall,
Chelmsford.

DURHAM
COUNTY COUNCIL.

TENDERS are invited for the ERECTION OF NEW TRAINING CENTRE AT AYKLEY HEADS, Durham, and are to be delivered to me not later than 10 a.m. on TUESDAY, 28th MARCH, 1961. Bills of Quantities and Tender form may be obtained from the County Architect, South-street, Durham.

J. K. HOPE,
Clerk of the County Council.

Shire Hall,
Durham.

WEST RIDING OF YORKSHIRE
COUNTY COUNCIL.

TENDERS are invited for BUILDER'S WORK IN INSTALLATION OF BED-LIFT AND INTERNAL ADAPTATIONS at Beech Towers, Staincliffe, Dewsbury.

Applications for Tender documents must be addressed to the Divisional Architect, Bishopgarth, Westfield-road, Wakefield.

The contract will be governed by the R.I.B.A. Conditions of Contract.

Sealed Tenders must be addressed to me, the undersigned, and received at Room 5, County Hall, Wakefield, not later than 12 NOON on MONDAY, 20th MARCH, 1961.

BERNARD KENYON,
Clerk of the County Council.

BRISTOL
CITY AND COUNTY.

TO BUILDING CONTRACTORS.

Docks Committee invite TENDERS for DEMOLITION OF EXISTING BRICK BUILT PREMISES AT 18 QUEEN-SQUARE AND REBUILDING IN THE SAME GEORGIAN STYLE BUT WITH REINFORCED CONCRETE FLOORS, TO PROVIDE OFFICE ACCOMMODATION.

Contractors willing to submit fixed price Tenders based on Bill of Quantities apply to City Architect, Council House, Bristol, 1, by 13th MARCH.

PUBLIC APPOINTMENTS

THE MANCHESTER COLLEGE OF SCIENCE AND TECHNOLOGY
(Faculty of Technology in the University of Manchester).

Applications are invited for a SENIOR LECTURESHIP IN INDUSTRIAL DESIGN within the Division of Civil Engineering and Building in the College, with corresponding title and status in the University of Manchester. The person appointed will be expected to assume responsibility for the new section dealing with Industrial Design under the general direction of Professor Denis Harper. A new post-graduate course and some teaching for other departments in the Faculty will be involved. Applicants should have had some industrial experience in the field of design and some knowledge of ergonomics would be valuable.

Salary in the scale £1,975 x £75 to £2,325 per annum. Superannuation under F.S.S.U. Family allowances.

Further particulars and form of application may be obtained from the Registrar, The Manchester College of Science and Technology, Manchester, 1, to whom completed forms should be returned by SATURDAY, 18th MARCH, 1961.

STAFFORDSHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.
VACANCIES.

ASSISTANT ARCHITECTS, £1,310-£1,480; £1,140-£1,310; £960-£1,140.

ARCHITECTURAL ASSISTANTS, £815-£960.

ARCHITECTURAL DRAUGHTSMEN, salary according to experience.

ASSISTANT QUANTITY SURVEYORS, £1,140-£1,310; £960-£1,140; £815-£960.

The Council may be able to assist with housing accommodation in cases of need, and also has a scheme for loans to employees wishing to purchase their own houses.

Good working conditions; assistance with removal expenses, lodging allowances, etc.

Forms of application from P. Woodcock, F.R.I.B.A., County Architect, Green Hall, Lichfield-road, Stafford.

Closing date—15th MARCH, 1961.

T. H. EVANS,
Clerk of the County Council.

PRESTON
COUNTY BOROUGH.

APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited from suitably qualified persons for the following appointments:—

(a) ARCHITECTURAL ASSISTANTS, A.P.T. IV (£1,140-£1,310).
(b) ARCHITECTURAL ASSISTANTS, A.P.T. III/IV (£960-£1,310).
(c) ARCHITECTURAL ASSISTANTS, A.P.T. II (£815-£960).
(d) ARCHITECTURAL ASSISTANTS, A.P.T. I (£645-£815).

Applications, stating age, qualifications, present position and salary, previous positions and full details of experience, together with the names and addresses of two referees, and stating clearly which appointment (a, b, c or d) is being applied for, to be received by me not later than FRIDAY, 17th MARCH, 1961.

W. E. E. LOCKLEY,
Town Clerk.

Municipal Building,
Preston.

CARDIFF CITY

CITY ARCHITECT'S DEPARTMENT.
CHIEF ASSISTANT ARCHITECT (HOUSING) A.P.T. GRADE V.

Applications are invited from qualified ARCHITECTS for the appointment of CHIEF ASSISTANT ARCHITECT (HOUSING), A.P.T. Grade V, £1,310-£1,480 per annum, plus a Motor Car Allowance in accordance with the Corporation Scale.

Applicants should have had a wide experience of all types of housing including multi-storey development.

General Conditions of Appointment may be obtained from the undersigned.

Applications stating age, qualifications and details of experience, together with the names of two persons to whom reference can be made, should be delivered to me not later than the 13th MARCH, 1961.

S. TAPPER-JONES,
Town Clerk.

City Hall,
Cardiff.
February, 1961.

RADNOR COUNTY COUNCIL

(This is an English speaking County)

ARCHITECTURAL ASSISTANTS

2 A.P.T. III (£960—£1,140)

A lodging allowance, proportion of approved removal expenses and rail fare home every three weeks for a limited period will be paid to married men appointed to the above two posts

ASSISTANT BUILDING INSPECTOR

I A.P.T. II (£815—£960)

CLERK OF WORKS

For new Primary school £20 per week for approximately 12 months.

Further details from J. A. McRobbie, *A.R.I.B.A.*
County Architect,
County Hall,
Llandrindod Wells, Radnor

AIR MINISTRY:

(a) STATION ENGINEERS (General Duties); (b) STATION ENGINEERS (Mechanical); (c) CLERKS OF WORKS (Building). Pensionable posts (50 for (a), 10 for (b), 50 for (c)) for men at least 25 and under 40 on 1.1.61 (with extension for regular Forces service and Overseas Civil Service) with appropriate O.N.C. or equivalent technical qualification. For (a) and (b) comprehensive engineering apprenticeship followed by at least 3 years' experience in an electrical or mechanical engineering firm, preferably on operation and maintenance work, is essential. Supervisory experience and (for (a)) knowledge of heating and ventilating plant and diesel engines an advantage. For (c) apprenticeship, training in a building school, experience as journeyman in a building trade, or at least 3 years' experience in estimating, costing, and management in a builder's general office is essential, followed by further appropriate experience including at least 3 years as foreman or Clerk of Works. Ex-R.A.F. Clerks of Works or Station Engineers who do not possess these qualifications may be considered if they have at least 3 years' relevant experience. Starting salary (national rate) £801 at 25 to £884 at 28 or over. Scale maximum £988. Promotion prospects. Write Civil Service Commission, 17 North Audley-street, London, W.1, for application form, quoting *S/5269/61*. Closing date 6th APRIL, 1961.

HAMPSHIRE
COUNTY COUNCIL.

Applications are invited for the following new pensionable posts in the office of the County Architect (H. Benson Ansell, A.R.I.B.A.). Canteen facilities. Five-day week. Separation allowance and assistance with removal expenses in approved cases.

ASSISTANT QUANTITY SURVEYOR, A.P.T. V (£1,310-£1,480). Candidates must have passed the final examination of the R.I.C.S. and have had considerable experience of all branches of quantity surveying.

ASSISTANT QUANTITY SURVEYOR, A.P.T. III-IV (£960-£1,310). Preference given to candidates who possess the final certificate of the R.I.C.S. or I.Q.S., and have had some years' experience in a Quantity Surveyor's office.

QUANTITY SURVEYING ASSISTANT, A.P.T. II-III (£815-£1,140) Candidates should possess the Intermediate certificate of the R.I.C.S. or be otherwise qualified, coupled with experience of abstracting and billing and taking off small jobs.

WORKER-UP, Clerical Division II-III (£710-£915). Candidates must have had some experience in a Quantity Surveyor's office and preference will be given to those studying for an appropriate qualification.

Application forms, returnable by 13th MARCH, from the Clerk of the County Council, The Castle, Winchester.

CIVIL SERVICE COMMISSION

QUANTITY SURVEYORS

Pensionable posts for men and women in:

ADMIRALTY
WAR DEPARTMENT
AIR MINISTRY
MINISTRY OF EDUCATION
MINISTRY OF HEALTH
MINISTRY OF HOUSING AND LOCAL GOVERNMENT
MINISTRY OF WORKS

Age at least 25 and under 35 on 1.1.61 (extension for regular Forces service, Overseas Civil Service, established civil service and temporary Government service as Quantity Surveyor). Candidates must have achieved Corporate Membership of R.I.C.S. (Quantities Section) or have passed examinations necessary for attaining such membership. National salary £936—£1,258 according to age, rising to £1,430. Promotion prospects. Write **Civil Service Commission, 17 North Audley Street, London, W.1** for application form quoting **S/63.**

EDINBURGH CITY
CORPORATION.

DEPARTMENT OF THE CITY ARCHITECT.

PROPERTY MAINTENANCE OFFICER, £1,350-£1,575. Experienced in all branches of maintenance (except engineering services); should be trained in building industry or be a qualified Quantity Surveyor; must have had administrative experience and be competent to deal with all forms of contracts and final accounts.

SENIOR ASSISTANT ARCHITECT, £1,125-£1,320. Qualified by examination and experienced in the handling of major contracts.

CHIEF LAND SURVEYOR, Admin. Div. Grade D, £1,135-£1,200. It is desirable that candidates be Associates of the R.I.C.S. (Land Survey Section) but applications will be considered from those with appropriate experience who have not had an opportunity of taking this qualification.

Applications giving age, full details of qualifications and experience and the names of two referees as to character should be sent to the City Architect City Chambers, Edinburgh, not later than 11th MARCH, 1961, marked "Staff—Confidential."

ENFIELD
BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
(Non-County Borough in the County of Middlesex. Population 109,700. Area 12,400 acres.)

Applications are invited, from suitably qualified persons, for the post of ARCHITECTURAL ASSISTANT, Grade A.P.T. III (£960-£1,140 per annum, plus appropriate London Weighting).

The commencing salary will be fixed at a point within the Scale commensurate with qualifications and experience.

The successful applicant will be engaged, inter alia, on the preparation of three-dimensional schemes for the redevelopment of the Town Centre as a pedestrian shopping precinct, the design of multi-storey point blocks of flats, and the re-development of clearance areas.

Housing accommodation may be made available in appropriate cases. The Council is also prepared to consider 100 per cent advance, to the successful candidate, for house purchase within the Borough.

Saturday mornings are normally free from duty.

Application forms, obtainable from H. D. Peake, M.Sc.(Eng.), Borough Engineer and Surveyor, 7 Little Park-gardens, Enfield, Middlesex, must be delivered to the undersigned as soon as possible.

CYRIL E. C. R. PLATTEN,
Town Clerk.

Public Offices,
Gentleman's-row,
Enfield,
Middlesex.

TYRONE
COUNTY EDUCATION COMMITTEE

Applications are invited by Tyrone County Education Committee for an appointment in the Department of their Chief Architect, F. M. Bone, Dip. Arch., A.R.I.B.A.

Applicants should be capable of a high standard of contemporary design and may be required to take charge of the design, working drawings and supervision of contracts. Possession of a car is desirable and appropriate travelling expenses will be paid. Removal expenses may be granted to married applicants.

The salary scale, at present under review, is as follows:—

For REGISTERED ARCHITECTS, £805 to £1,260, alternatively; for ARCHITECTURAL ASSISTANTS with suitable experience, £585 to £905.

Placing on the scales will be according to qualifications and experience.

Applications on forms from Chief Education Officer, Education Offices, Omagh, should be lodged with him by 21st MARCH, 1961.

TAMWORTH
BOROUGH.

Applications are invited for the undermentioned temporary appointments of supervisory staff in connection with large-scale residential development on the Borough Council's Comberford-road Housing Site for the housing of overspill population from the City of Birmingham.

The appointments will be for a period of three to four years in each case.

(i) RESIDENT ENGINEER: Salary £1,200-£1,300 per annum. Car allowance at casual user rate.

Applicants must have considerable experience of large-scale housing projects, including the construction of sewers and estate roads. Preference will be given to persons holding a recognised professional qualification or degree in civil engineering.

(ii) CLERK OF WORKS (HOUSING): Salary £1,000 per annum. Car allowance at casual user rate.

Applicants must have sound knowledge and experience of building and house construction and preference will be given to building foremen and persons holding a suitable qualification.

Further details and forms of application may be obtained from the undersigned by whom applications should be received not later than the 3rd MARCH, 1961.

H. B. LEAKE,
Town Clerk.

Municipal Offices,
Tamworth.
14th February, 1961.

NOTTINGHAM CITY.

APPOINTMENT OF CITY ARCHITECT.

The Corporation invites applications from suitably qualified persons for the post of CITY ARCHITECT. The person appointed will be responsible for the Corporation's Architectural and Building work.

The salary for this post will be £3,760 rising by three annual increments of £125 to £4,135 per annum, and the person appointed will be required to contribute to the Corporation's Superannuation Scheme and to pass a medical examination.

Applications accompanied by the names of three persons to whom reference can be made must be delivered to me not later than the LAST POST on WEDNESDAY, the 29th MARCH, 1961, in an envelope endorsed "City Architect."

T. J. OWEN,
Town Clerk.

The Guildhall,
Nottingham.

BUCKS
COUNTY COUNCIL.

Applications are invited for the following appointments in the County Architect's Department:—

TWO ASSISTANT QUANTITY SURVEYORS, A.P.T. Grade IV, £1,140-£1,310 p.a.;

JUNIOR ASSISTANT QUANTITY SURVEYOR, General Division, £260-£630 p.a.

The appointments are superannuable and subject to medical examination, and applicants should be suitably qualified for the post of Assistant Quantity Surveyor.

A weekly allowance of 25s. and return fare home once every two months may be paid for six months to newly appointed married officers of the council unable to find accommodation.

Applications, on forms provided, must be returned by 13th MARCH, 1961.

F. B. POOLEY,
County Architect.

County Offices,
Aylesbury,
Bucks.

MANSFIELD
BOROUGH.

APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT.
A.P.T. IV (£1,140-£1,310).

Applications are invited for the ABOVE PERMANENT APPOINTMENT in the Borough Engineer and Surveyor's Department.

Applicants must be Associate Members of the Royal Institute of British Architects and must have had some years' practical experience.

A house on service tenancy may be rented if required; it is also the Corporation's wish that the person appointed shall live within the Borough.

Applications stating age, marital state, training, past and present appointments with salary, and experience, together with the names of three referees should be sent to the Borough Engineer and Surveyor, Carr Bank, Mansfield, Notts, to arrive not later than FRIDAY, 10th MARCH, 1961.

A. C. SHEPHERD,
Town Clerk.

Carr Bank,
Mansfield,
Notts.

LANCASHIRE
COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT.

SENIOR ASSISTANT ARCHITECTS (N.J.C. Scale "B"—£1,505-£1,670).

Applications are invited from experienced Registered ARCHITECTS, required on the permanent staff of the County Architect, to deal with a wide variety of major projects, including large Technical Colleges, Magistrates Courts, Police Training Schools, etc.

Application forms and details of appointment obtainable from the County Architect, P.O. Box 26, County Hall, Preston, returnable by 17th MARCH, 1961.

WORCESTER CITY.

APPOINTMENT OF ARCHITECTURAL STAFF.

Applications are invited to fill new appointments in the Architectural Section of the City Engineer and Surveyor's Department.

SENIOR ASSISTANT ARCHITECT, A.P.T. Grade IV (salary £1,140-£1,310).

Applicants must hold the A.R.I.B.A. qualification.

TWO ARCHITECTURAL ASSISTANTS, A.P.T. Grade I (salary £645-£815).

The appointments are superannuable and subject to medical examination.

Housing accommodation will be offered, if necessary, and the Corporation are prepared to make a contribution towards removal expenses.

Casual Users' Car Allowances will be applicable.

Applications stating age, present and previous appointments and experience, together with the names of two referees are to be sent to the City Engineer and Surveyor, 22 Bridge-street, Worcester, by 6th MARCH, 1961.

BERTRAM WEBSTER,
Town Clerk.

Guildhall,
Worcester.

METROPOLITAN POLICE
RECEIVER'S OFFICE.

Applications are invited for the following positions in connection with the design and erection of Police Housing, Police Stations, Single Men's Hostels, Cadets' Residential Training Centres and Magistrates' Courts within the Metropolitan Police District.

ASSISTANT ARCHITECTS.
Salary: £991 p.a. rising annually to £1,490 p.a. (Maximum salary on entry £1,318 p.a.)
Qualifications: Must be registered Architects.

LEADING ARCHITECTURAL ASSISTANTS.
Salary: £1,048 p.a. rising annually to £1,220 p.a.
Qualifications: Inter-R.I.B.A., H.N.C. or equivalent.

ARCHITECTURAL ASSISTANTS.
Salary: £658 p.a. at age 21 rising annually to £1,048 p.a. (Maximum salary on entry £960 p.a. at age 28 or over.)
Qualifications: O.N.C. Inter-R.I.B.A., or equivalent.

TECHNICAL ASSISTANTS III.
Salary: £752 p.a. at age 21 rising annually to £1,043 p.a. (Maximum salary on entry £939 p.a. at age 28 or over.)
Qualifications: Inter-R.I.B.A./R.I.C.S. (Building) or equivalent.

J. INNES ELLIOTT, B.Arch., F.R.I.B.A.
Chief Architect and Surveyor.

Apply to:
Chief Clerk, Architect and Surveyor's Department, New Scotland Yard, S.W.1.

CAMBRIDGESHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for appointment as ARCHITECTURAL ASSISTANTS on salaries in Grade I of the A.P.T. Scale (£645-£815).

Applicants should have reached or be near Intermediate standard of the R.I.B.A., and should be keen to progress further.

The appointment is subject to the Local Government Superannuation Acts, 1937 to 1958, the National Scheme of Conditions of Service, a satisfactory medical examination and terminable at one month's notice on either side.

Commencing salary will be in accordance with experience.

Applications, stating age, present salary, present and previous appointments, and details of training and experience, together with the names of two referees, should be submitted to the undersigned not later than MONDAY, 13th MARCH, 1961.

CHARLES PHYTHIAN,
Clerk of the County Council.

Shire Hall,
Cambridge.
15th February, 1961.

WARWICKSHIRE
COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.
ASSISTANT CHIEF BUILDING SURVEYOR.
Grade A.P.T. IV (£1,140-£1,310).

Applications are invited for the above appointment from persons who have had considerable experience in all branches of the building trade and are capable of preparing estimates and specifications for maintenance works and improvements to all types of County properties.

Applicants should have passed the final examination of the R.I.C.S. (Building Section) or possess a comparable qualification.

The commencing salary can be within the grade according to ability and experience. Five-day week worked. The Council have schemes for the payment of removal expenses and a lodging allowance to married officers. Application forms and full conditions applicable to the appointment can be obtained from Eric Davies, F.R.I.B.A., A.M.T.P.I., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall,
Warwick.
February, 1961.

ESSEX
COUNTY COUNCIL.

CLERK OF WORKS on the temporary staff for large public building contracts such as schools, colleges, police and fire stations in Grays, Hornchurch, Basildon and Loughton areas. Commencing salary according to qualifications and experience but not exceeding £1,140.

Candidates must have had practical training and experience in one of the main building trades and also experience in supervision.

Application form from H. Conolly, C.B.E., F.R.I.B.A., County Architect, County Hall, Chelmsford, returnable by 13th MARCH, 1961.

LONDON
CORPORATION.

Applications invited for temporary appointment of ASSISTANT ARCHITECT in City Engineer's Office. Salary £1,195 p.a. Approximate duration 2 years.

Candidates should have had good general experience in preparation of working details and have passed the intermediate R.I.B.A.

Applications, stating age, appointments held and experience, with names of two referees, to the City Engineer, Guildhall, E.C.2.

WAKEFIELD CITY.

CITY ENGINEER'S DEPARTMENT.
APPOINTMENT OF ASSISTANT QUANTITY SURVEYOR.
GRADE A.P.T. I, II or III.

Applications are invited for the above superannuable appointment at a salary in accordance with Grade A.P.T. I, II or III, depending upon qualifications and experience.

Candidates should have had experience with a Local Authority and preference will be given to those who have passed or are studying for the examination of the R.I.C.S.

HOUSING ACCOMMODATION WILL BE CONSIDERED.

A 5-day working week is in operation.

Applications stating age, qualifications and experience together with the names of two referees to be sent to the City Engineer, Town Hall, Wakefield, by the 13th MARCH, 1961.

NEWCASTLE UPON TYNE
CITY AND COUNTY.

CITY ARCHITECT'S DEPARTMENT.

A unique opportunity exists in this office for competent ARCHITECTS to take part in one of the most ambitious programmes of varied building works in the country, and vacancies in the establishment occur for ARCHITECTS who will be considered on their ability in design, experience, and architectural outlook, in the following grades:

J.N.C. "C": £1,560-£1,825 per annum.
J.N.C. "B": £1,410-£1,670 per annum.
A.P.T. V: £1,310-£1,480 per annum.
A.P.T. IV: £1,140-£1,310 per annum.
A.P.T. III: £960-£1,140 per annum.
A.P.T. II: £815-£960 per annum.
A.P.T. I: £645-£815 per annum.

The Department is engaged upon a wide and varied programme of major redevelopment schemes embracing multi-storey flats, shopping precincts and associated community buildings, one of which schemes is the Scotswood-road Redevelopment Area to rehouse approximately 5,000 people, and which is expected to cost in the region of £12 million.

Planning work has now commenced on the new Education Precinct in the central area, comprising Colleges of Further Education, Art and Industrial Design, Drama, Commerce, and Multi-storey Hostels, which will be the largest development of its kind in the country.

Further projects include: Airport Terminal; Abattoir and Fatstock Market; Vegetable Markets; Central Library; and Divisional Police Headquarters, etc., and a varied programme of normal housing development of a stimulating character.

The department is also engaged on the New Town Hall, where an exceptional opportunity is presented for working on a building of some £4 million in value, and being executed in materials of the highest quality.

Architect's wishing to take part in one of Britain's most stimulating programmes should apply immediately for further details and forms of application to George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18 Cloth Market, Newcastle upon Tyne, 1, indicating the grade for which they wish to apply.

JOHN ATKINSON,
Town Clerk.

Town Hall,
Newcastle upon Tyne, 1.

SOWERBY BRIDGE
URBAN DISTRICT COUNCIL.

CHIEF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of CHIEF ARCHITECTURAL ASSISTANT at a salary in accordance with A.P.T. IV (£1,140-£1,310). An Essential Users Car Allowance will be paid. Candidates must be suitably qualified.

The successful applicant will be responsible to the Engineer and Surveyor for all the Architectural work carried out by the Council who have an extensive building programme which, in addition to normal housing requirements, includes the building of houses for sale, redevelopment areas, and multi-storey flats.

Housing accommodation will be available if required.

The appointment will be subject to the Local Government Superannuation Acts, and the successful applicant will be required to pass a medical examination.

Applications, endorsed "Chief Architectural Assistant," stating age, qualifications and experience, and giving the names and addresses of two persons to whom reference may be made, must reach the undersigned, not later than MONDAY, the 13th MARCH, 1961.

ALFRED WOMERSLEY,
Clerk of the Council.

Allan House,
Station-road,
Sowerby Bridge,
Yorkshire.

EAST HAM
COUNTY BOROUGH.

HOUSING DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited. Salary Grade A.P.T. II (£815 x £30(4) x £25(1)—£960) plus London Weighting.

Applicants should be experienced in the preparation of working drawings, details for construction of new dwellings and conversion of existing properties.

Further details and application form (returnable by 15th MARCH, 1961) from the Town Clerk, Town Hall, East Ham, E.6.

SURREY COUNTY COUNCIL

Applications invited for following appointments:

GRADE IV. (£1,140—£1,310 p.a. plus £45 p.a. London Allowance). Approved removal expenses will be paid to successful candidates in this Grade.

ARCHITECTS. Must be A.R.I.B.A. and have had experience in preparation of drawings and specifications, and be capable of assuming responsibility for medium to large scale contracts.

QUANTITY SURVEYORS. Must be A.R.I.C.S. and have had experience of estimating, taking off, valuing works in progress and final accounts for large public buildings, including all specialist works.

STRUCTURAL ENGINEERS. Must be qualified Structural or Civil Engineers and have had experience in design and detailing of steelwork and/or reinforced concrete for medium to large scale contracts.

HEATING & VENTILATING ENGINEERS. Must be A.M.I.H.V.E. and have had experience in design of large heating, ventilating, hot water supply and gas service installations. The successful applicants must be capable of taking charge of works from commencement to final completion.

ELECTRICAL ENGINEERS. Must be A.M.I.E.E. and have had experience in design of large electrical services installations. The successful applicant must be capable of taking charge of works from commencement to final completion.

GRADE II. (£815—£960 p.a. plus up to £40 p.a. London Allowance).

ARCHITECTURAL ASSISTANTS. Must be of good general training, preference given those who have passed Inter. R.I.B.A.

QUANTITY SURVEYING ASSISTANT. Preference given those who have passed Inter. R.I.C.S.

STRUCTURAL ENGINEERING ASSISTANT. Must have knowledge of detail and some design in steel or concrete.

Candidates will be appointed at the appropriate point within the scale according to age and ability.

Full details, present salary and three copy testimonials, preferably one from present employer, to

COUNTY ARCHITECT, COUNTY HALL, KINGSTON
as soon as possible.

WOOLWICH
METROPOLITAN BOROUGH.

SENIOR ASSISTANT ARCHITECT.

Applications are invited for the above permanent appointment in the Borough Engineer's Department. Salary within Grade A.P.T. V (£1,310-£1,480) plus London weighting. Superannuation scheme.

Candidates must have passed the final examination of the R.I.B.A.

The Council has an extensive and interesting programme of works.

Applications, stating experience, qualifications and age, and giving names of two referees to Town Clerk, Woolwich, S.E.18, by 14th MARCH, 1961.

LEYTON
BOROUGH.

Applications invited for appointments of ASSISTANT ARCHITECTS. Salary within Grade A.P.T. III, £960-£1,140 per annum plus London Weighting. Housing accommodation will be provided. 5-day week. National Joint Council Conditions of Service.

A large and varied programme of capital works in hand or projected offers good opportunities of gaining experience.

Apply with details to Borough Engineer, Town Hall, Leyton, E.10, not later than 16th MARCH, 1961.

D. J. OSBORNE,
Town Clerk.

Town Hall,
Leyton, E.10.

BEXLEY
BOROUGH

BUILDING WORKS DEPARTMENT.

Applications are invited for the appointment of an INCENTIVE OFFICER at a salary in accordance with Grade III of the A.P.T. Division (£960-£1,140) plus London Weighting Allowance of £25 or £45 according to age. Applicants should have wide experience of the building trades. The person appointed will be required to set target hours for and operate an incentive bonus scheme.

Application forms and conditions of appointment obtainable from the Building Works Manager, Council Offices, Bexleyheath, Kent, to whom applications must be delivered not later than THURSDAY, 16th MARCH, 1961.

ARTHUR GOLDFINCH,
Town Clerk.

CARLISLE CITY.

CITY SURVEYOR'S DEPARTMENT.
PRINCIPAL ASSISTANT ARCHITECTS.

Applications are invited from qualified ARCHITECTS for the above posts. A great deal of interesting and sizeable work is in progress and projected. Salary according to A.P.T. V (£1,310-£1,480 per annum) and staff houses are available.

Application forms obtainable from the City Surveyor, 18 Fisher-street, Carlisle. Closing date noon on 20th MARCH.

H. D. A. ROBERTSON,
Town Clerk.

RADNOR COUNTY COUNCIL

(This is an English speaking County)

ARCHITECTURAL ASSISTANTS

2 A.P.T. III (£960—£1,140)

A lodging allowance, proportion of approved removal expenses and rail fare home every three weeks for a limited period will be paid to married men appointed to the above two posts

ASSISTANT BUILDING INSPECTOR

1 A.P.T. II (£815—£960)

CLERK OF WORKS

For new Primary school £20 per week for approximately 12 months.

Further details from J. A. McRobbie, *A.R.I.B.A.*
County Architect,
County Hall,
Llandrindod Wells, Radnor

AIR MINISTRY:

(a) STATION ENGINEERS (General Duties); (b) STATION ENGINEERS (Mechanical); (c) CLERKS OF WORKS (Building). Pensionable posts (50 for (a), 10 for (b), 50 for (c)) for men at least 25 and under 40 on 1.1.61 (with extension for regular Forces service and Overseas Civil Service) with appropriate O.N.C. or equivalent technical qualification. For (a) and (b) comprehensive engineering apprenticeship followed by at least 3 years' experience in an electrical or mechanical engineering firm, preferably on operation and maintenance work, is essential. Supervisory experience and (for (a)) knowledge of heating and ventilating plant and diesel engines an advantage. For (c) apprenticeship, training in a building school, experience as journeyman in a building trade, or at least 3 years' experience in estimating, costing, and management in a builder's general office is essential, followed by further appropriate experience including at least 3 years as foreman or Clerk of Works. Ex-R.A.F. Clerks of Works or Station Engineers who do not possess these qualifications may be considered if they have at least 3 years' relevant experience. Starting salary (national rate) £801 at 25 to £884 at 28 or over. Scale maximum £988. Promotion prospects. Write Civil Service Commission, 17 North Audley-street, London, W.1, for application form, quoting *S/5269/61*. Closing date 6th APRIL, 1961.

HAMPSHIRE
COUNTY COUNCIL.

Applications are invited for the following new pensionable posts in the office of the County Architect (H. Benson Ansell, A.R.I.B.A.). Canteen facilities. Five-day week. Separation allowance and assistance with removal expenses in approved cases.

ASSISTANT QUANTITY SURVEYOR, A.P.T. V (£1,310-£1,480). Candidates must have passed the final examination of the R.I.C.S. and have had considerable experience of all branches of quantity surveying.

ASSISTANT QUANTITY SURVEYOR, A.P.T. III-IV (£960-£1,310). Preference given to candidates who possess the final certificate of the R.I.C.S. or I.Q.S., and have had some years' experience in a Quantity Surveyor's office.

QUANTITY SURVEYING ASSISTANT, A.P.T. II-III (£815-£1,140) Candidates should possess the Intermediate certificate of the R.I.C.S. or be otherwise qualified, coupled with experience of abstracting and billing and taking off small jobs.

WORKER-UP, Clerical Division II-III (£710-£915). Candidates must have had some experience in a Quantity Surveyor's office and preference will be given to those studying for an appropriate qualification.

Application forms, returnable by 13th MARCH, from the Clerk of the County Council, The Castle, Winchester.

CIVIL SERVICE COMMISSION

QUANTITY SURVEYORS

Pensionable posts for men and women in:

ADMIRALTY
WAR DEPARTMENT
AIR MINISTRY
MINISTRY OF EDUCATION
MINISTRY OF HEALTH
MINISTRY OF HOUSING AND LOCAL GOVERNMENT
MINISTRY OF WORKS

Age at least 25 and under 35 on 1.1.61 (extension for regular Forces service, Overseas Civil Service, established civil service and temporary Government service as Quantity Surveyor). Candidates must have achieved Corporate Membership of R.I.C.S. (Quantities Section) or have passed examinations necessary for attaining such membership. National salary £936—£1,258 according to age, rising to £1,430. Promotion prospects. Write **Civil Service Commission, 17 North Audley Street, London, W.1** for application form quoting **S/63.**

EDINBURGH CITY
CORPORATION.

DEPARTMENT OF THE CITY ARCHITECT.

PROPERTY MAINTENANCE OFFICER, £1,350-£1,575. Experienced in all branches of maintenance (except engineering services); should be trained in building industry or be a qualified Quantity Surveyor; must have had administrative experience and be competent to deal with all forms of contracts and final accounts.

SENIOR ASSISTANT ARCHITECT, £1,125-£1,320. Qualified by examination and experienced in the handling of major contracts.

CHIEF LAND SURVEYOR, Admin. Div. Grade D, £1,135-£1,200. It is desirable that candidates be Associates of the R.I.C.S. (Land Survey Section) but applications will be considered from those with appropriate experience who have not had an opportunity of taking this qualification.

Applications giving age, full details of qualifications and experience and the names of two referees as to character should be sent to the City Architect City Chambers, Edinburgh, not later than 11th MARCH, 1961, marked "Staff—Confidential."

ENFIELD
BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
(Non-County Borough in the County of Middlesex. Population 109,700. Area 12,400 acres.)

Applications are invited, from suitably qualified persons, for the post of ARCHITECTURAL ASSISTANT, Grade A.P.T. III (£960-£1,140 per annum, plus appropriate London Weighting).

The commencing salary will be fixed at a point within the Scale commensurate with qualifications and experience.

The successful applicant will be engaged, inter alia, on the preparation of three-dimensional schemes for the redevelopment of the Town Centre as a pedestrian shopping precinct, the design of multi-storey point blocks of flats, and the re-development of clearance areas.

Housing accommodation may be made available in appropriate cases. The Council is also prepared to consider 100 per cent advance, to the successful candidate, for house purchase within the Borough.

Saturday mornings are normally free from duty.

Application forms, obtainable from H. D. Peake, M.Sc.(Eng.), Borough Engineer and Surveyor, 7 Little Park-gardens, Enfield, Middlesex, must be delivered to the undersigned as soon as possible.

CYRIL E. C. R. PLATTEN,
Town Clerk.

Public Offices,
Gentleman's-row,
Enfield,
Middlesex.

TYRONE
COUNTY EDUCATION COMMITTEE

Applications are invited by Tyrone County Education Committee for an appointment in the Department of their Chief Architect, P. M. Bone, Dip. Arch., A.R.I.B.A.

Applicants should be capable of a high standard of contemporary design and may be required to take charge of the design, working drawings and supervision of contracts. Possession of a car is desirable and appropriate travelling expenses will be paid. Removal expenses may be granted to married applicants.

The salary scale, at present under review, is as follows:—

For REGISTERED ARCHITECTS, £805 to £1,260, alternatively; for ARCHITECTURAL ASSISTANTS with suitable experience, £585 to £905.

Placing on the scales will be according to qualifications and experience.

Applications on forms from Chief Education Officer, Education Offices, Omagh, should be lodged with him by 21st MARCH, 1961.

TAMWORTH
BOROUGH.

Applications are invited for the undermentioned temporary appointments of supervisory staff in connection with large-scale residential development on the Borough Council's Comberford-road Housing Site for the housing of overspill population from the City of Birmingham.

The appointments will be for a period of three to four years in each case.

(i) RESIDENT ENGINEER: Salary £1,200-£1,300 per annum. Car allowance at casual user rate.

Applicants must have considerable experience of large-scale housing projects, including the construction of sewers and estate roads. Preference will be given to persons holding a recognised professional qualification or degree in civil engineering.

(ii) CLERK OF WORKS (HOUSING): Salary £1,000 per annum. Car allowance at casual user rate.

Applicants must have sound knowledge and experience of building and house construction and preference will be given to building tradesmen and persons holding a suitable qualification.

Further details and forms of application may be obtained from the undersigned by whom applications should be received not later than the 3rd MARCH, 1961.

H. B. LEAKE,
Town Clerk.

Municipal Offices,
Tamworth.
14th February, 1961.

NOTTINGHAM CITY.

APPOINTMENT OF CITY ARCHITECT.

The Corporation invites applications from suitably qualified persons for the post of CITY ARCHITECT. The person appointed will be responsible for the Corporation's Architectural and Building work.

The salary for this post will be £3,760 rising by three annual increments of £125 to £4,135 per annum, and the person appointed will be required to contribute to the Corporation's Superannuation Scheme and to pass a medical examination.

Applications accompanied by the names of three persons to whom reference can be made must be delivered to me not later than the LAST POST on WEDNESDAY, the 29th MARCH, 1961, in an envelope endorsed "City Architect."

T. J. OWEN,
Town Clerk.

The Guildhall,
Nottingham.

BUCKS
COUNTY COUNCIL.

Applications are invited for the following appointments in the County Architect's Department:—

TWO ASSISTANT QUANTITY SURVEYORS, A.P.T. Grade IV, £1,140-£1,310 p.a.;

JUNIOR ASSISTANT QUANTITY SURVEYOR, General Division, £260-£630 p.a.

The appointments are superannuable and subject to medical examination, and applicants should be suitably qualified for the post of Assistant Quantity Surveyor.

A weekly allowance of 25s. and return fare home once every two months may be paid for six months to newly appointed married officers of the council unable to find accommodation.

Applications, on forms provided, must be returned by 13th MARCH, 1961.

F. B. POOLEY,
County Architect.

County Offices,
Aylesbury,
Bucks.

MANSFIELD
BOROUGH.

APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT.
A.P.T. IV (£1,140-£1,310).

Applications are invited for the ABOVE PERMANENT APPOINTMENT in the Borough Engineer and Surveyor's Department.

Applicants must be Associate Members of the Royal Institute of British Architects and must have had some years' practical experience.

A house on service tenancy may be rented if required; it is also the Corporation's wish that the person appointed shall live within the Borough.

Applications stating age, marital state, training, past and present appointments with salary, and experience, together with the names of three referees should be sent to the Borough Engineer and Surveyor, Carr Bank, Mansfield, Notts, to arrive not later than FRIDAY, 10th MARCH, 1961.

A. C. SHEPHERD,
Town Clerk.

Carr Bank,
Mansfield,
Notts.

LANCASHIRE
COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT.

SENIOR ASSISTANT ARCHITECTS (N.J.C. Scale "B"—£1,505-£1,670).

Applications are invited from experienced Registered ARCHITECTS, required on the permanent staff of the County Architect, to deal with a wide variety of major projects, including large Technical Colleges, Magistrates Courts, Police Training Schools, etc.

Application forms and details of appointment obtainable from the County Architect, P.O. Box 26, County Hall, Preston, returnable by 17th MARCH, 1961.

WORCESTER CITY.

APPOINTMENT OF ARCHITECTURAL STAFF.

Applications are invited to fill new appointments in the Architectural Section of the City Engineer and Surveyor's Department.

SENIOR ASSISTANT ARCHITECT, A.P.T. Grade IV (salary £1,140-£1,310).

Applicants must hold the A.R.I.B.A. qualification.

TWO ARCHITECTURAL ASSISTANTS, A.P.T. Grade I (salary £645-£815).

The appointments are superannuable and subject to medical examination.

Housing accommodation will be offered, if necessary, and the Corporation are prepared to make a contribution towards removal expenses.

Casual Users' Car Allowances will be applicable.

Applications stating age, present and previous appointments and experience, together with the names of two referees are to be sent to the City Engineer and Surveyor, 22 Bridge-street, Worcester, by 6th MARCH, 1961.

BERTRAM WEBSTER,
Town Clerk.

Guildhall,
Worcester.

METROPOLITAN POLICE
RECEIVER'S OFFICE.

Applications are invited for the following positions in connection with the design and erection of Police Housing, Police Stations, Single Men's Hostels, Cadets' Residential Training Centres and Magistrates' Courts within the Metropolitan Police District.

ASSISTANT ARCHITECTS.
Salary: £991 p.a. rising annually to £1,490 p.a. (Maximum salary on entry £1,318 p.a.)
Qualifications: Must be registered Architects.

LEADING ARCHITECTURAL ASSISTANTS.
Salary: £1,048 p.a. rising annually to £1,220 p.a.
Qualifications: Inter-R.I.B.A., H.N.C. or equivalent.

ARCHITECTURAL ASSISTANTS.
Salary: £658 p.a. at age 21 rising annually to £1,048 p.a. (Maximum salary on entry £960 p.a. at age 28 or over.)
Qualifications: O.N.C. Inter-R.I.B.A., or equivalent.

TECHNICAL ASSISTANTS III.
Salary: £752 p.a. at age 21 rising annually to £1,043 p.a. (Maximum salary on entry £939 p.a. at age 28 or over.)
Qualifications: Inter-R.I.B.A./R.I.C.S. (Building) or equivalent.

J. INNES ELLIOTT, B.Arch., F.R.I.B.A.
Chief Architect and Surveyor.

Apply to:
Chief Clerk, Architect and Surveyor's Department, New Scotland Yard, S.W.1.

CAMBRIDGESHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for appointment as ARCHITECTURAL ASSISTANTS on salaries in Grade I of the A.P.T. Scale (£645-£815).

Applicants should have reached or be near Intermediate standard of the R.I.B.A., and should be keen to progress further.

The appointment is subject to the Local Government Superannuation Acts, 1937 to 1958, the National Scheme of Conditions of Service, a satisfactory medical examination and terminable at one month's notice on either side.

Commencing salary will be in accordance with experience.

Applications, stating age, present salary, present and previous appointments, and details of training and experience, together with the names of two referees, should be submitted to the undersigned not later than MONDAY, 13th MARCH, 1961.

CHARLES PHYTHIAN,
Clerk of the County Council.

Shire Hall,
Cambridge.
15th February, 1961.

WARWICKSHIRE
COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.
ASSISTANT CHIEF BUILDING SURVEYOR.
Grade A.P.T. IV (£1,140-£1,310).

Applications are invited for the above appointment from persons who have had considerable experience in all branches of the building trade and are capable of preparing estimates and specifications for maintenance works and improvements to all types of County properties.

Applicants should have passed the final examination of the R.I.C.S. (Building Section) or possess a comparable qualification.

The commencing salary can be within the grade according to ability and experience. Five-day week worked. The Council have schemes for the payment of removal expenses and a lodging allowance to married officers. Application forms and full conditions applicable to the appointment can be obtained from Eric Davies, F.R.I.B.A., A.M.T.P.I., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall,
Warwick.
February, 1961.

ESSEX
COUNTY COUNCIL.

CLERK OF WORKS on the temporary staff for large public building contracts such as schools, colleges, police and fire stations in Grays, Hornchurch, Basildon and Loughton areas. Commencing salary according to qualifications and experience but not exceeding £1,140.

Candidates must have had practical training and experience in one of the main building trades and also experience in supervision.

Application form from H. Conolly, C.B.E., F.R.I.B.A., County Architect, County Hall, Chelmsford, returnable by 13th MARCH, 1961.

LONDON
CORPORATION.

Applications invited for temporary appointment of ASSISTANT ARCHITECT in City Engineer's Office. Salary £1,195 p.a. Approximate duration 2 years.

Candidates should have had good general experience in preparation of working details and have passed the intermediate R.I.B.A.

Applications, stating age, appointments held and experience, with names of two referees, to the City Engineer, Guildhall, E.C.2.

WAKEFIELD CITY.

CITY ENGINEER'S DEPARTMENT.
APPOINTMENT OF ASSISTANT QUANTITY SURVEYOR.
GRADE A.P.T. I, II or III.

Applications are invited for the above superannuable appointment at a salary in accordance with Grade A.P.T. I, II or III, depending upon qualifications and experience.

Candidates should have had experience with a Local Authority and preference will be given to those who have passed or are studying for the examination of the R.I.C.S.

HOUSING ACCOMMODATION WILL BE CONSIDERED.

A 5-day working week is in operation.

Applications stating age, qualifications and experience together with the names of two referees to be sent to the City Engineer, Town Hall, Wakefield, by the 13th MARCH, 1961.

NEWCASTLE UPON TYNE
CITY AND COUNTY.

CITY ARCHITECT'S DEPARTMENT.

A unique opportunity exists in this office for competent ARCHITECTS to take part in one of the most ambitious programmes of varied building works in the country, and vacancies in the establishment occur for ARCHITECTS who will be considered on their ability in design, experience, and architectural outlook, in the following grades:

J.N.C. "C": £1,560-£1,825 per annum.
J.N.C. "B": £1,410-£1,670 per annum.
A.P.T. V: £1,310-£1,480 per annum.
A.P.T. IV: £1,140-£1,310 per annum.
A.P.T. III: £960-£1,140 per annum.
A.P.T. II: £815-£960 per annum.
A.P.T. I: £645-£815 per annum.

The Department is engaged upon a wide and varied programme of major redevelopment schemes embracing multi-storey flats, shopping precincts and associated community buildings, one of which schemes is the Scotswood-road Redevelopment Area to rehouse approximately 5,000 people, and which is expected to cost in the region of £12 million.

Planning work has now commenced on the new Education Precinct in the central area, comprising Colleges of Further Education, Art and Industrial Design, Drama, Commerce, and Multi-storey Hostels, which will be the largest development of its kind in the country.

Further projects include: Airport Terminal; Abattoir and Fatstock Market; Vegetable Markets; Central Library; and Divisional Police Headquarters, etc., and a varied programme of normal housing development of a stimulating character.

The department is also engaged on the New Town Hall, where an exceptional opportunity is presented for working on a building of some £4 million in value, and being executed in materials of the highest quality.

Architect's wishing to take part in one of Britain's most stimulating programmes should apply immediately for further details and forms of application to George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18 Cloth Market, Newcastle upon Tyne, 1, indicating the grade for which they wish to apply.

JOHN ATKINSON,
Town Clerk.

Town Hall,
Newcastle upon Tyne, 1.

SOWERBY BRIDGE
URBAN DISTRICT COUNCIL.

CHIEF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of CHIEF ARCHITECTURAL ASSISTANT at a salary in accordance with A.P.T. IV (£1,140-£1,310). An Essential Users Car Allowance will be paid. Candidates must be suitably qualified.

The successful applicant will be responsible to the Engineer and Surveyor for all the Architectural work carried out by the Council who have an extensive building programme which, in addition to normal housing requirements, includes the building of houses for sale, redevelopment areas, and multi-storey flats.

Housing accommodation will be available if required.

The appointment will be subject to the Local Government Superannuation Acts, and the successful applicant will be required to pass a medical examination.

Applications, endorsed "Chief Architectural Assistant," stating age, qualifications and experience, and giving the names and addresses of two persons to whom reference may be made, must reach the undersigned, not later than MONDAY, the 13th MARCH, 1961.

ALFRED WOMERSLEY,
Clerk of the Council.

Allan House,
Station-road,
Sowerby Bridge,
Yorkshire.

EAST HAM
COUNTY BOROUGH.

HOUSING DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited. Salary Grade A.P.T. II (£815 x £30(4) x £25(7)—£960) plus London Weighting.

Applicants should be experienced in the preparation of working drawings, details for construction of new dwellings and conversion of existing properties.

Further details and application form (returnable by 15th MARCH, 1961) from the Town Clerk, Town Hall, East Ham, E.6.

SURREY COUNTY COUNCIL

Applications invited for following appointments:

GRADE IV. (£1,140—£1,310 p.a. plus £45 p.a. London Allowance). Approved removal expenses will be paid to successful candidates in this Grade.

ARCHITECTS. Must be A.R.I.B.A. and have had experience in preparation of drawings and specifications, and be capable of assuming responsibility for medium to large scale contracts.

QUANTITY SURVEYORS. Must be A.R.I.C.S. and have had experience of estimating, taking off, valuing works in progress and final accounts for large public buildings, including all specialist works.

STRUCTURAL ENGINEERS. Must be qualified Structural or Civil Engineers and have had experience in design and detailing of steelwork and/or reinforced concrete for medium to large scale contracts.

HEATING & VENTILATING ENGINEERS. Must be A.M.I.H.V.E. and have had experience in design of large heating, ventilating, hot water supply and gas service installations. The successful applicants must be capable of taking charge of works from commencement to final completion.

ELECTRICAL ENGINEERS. Must be A.M.I.E.E. and have had experience in design of large electrical services installations. The successful applicant must be capable of taking charge of works from commencement to final completion.

GRADE II. (£815—£960 p.a. plus up to £40 p.a. London Allowance).

ARCHITECTURAL ASSISTANTS. Must be of good general training, preference given those who have passed Inter. R.I.B.A.

QUANTITY SURVEYING ASSISTANT. Preference given those who have passed Inter. R.I.C.S.

STRUCTURAL ENGINEERING ASSISTANT. Must have knowledge of detail and some design in steel or concrete.

Candidates will be appointed at the appropriate point within the scale according to age and ability.

Full details, present salary and three copy testimonials, preferably one from present employer, to

COUNTY ARCHITECT, COUNTY HALL, KINGSTON
as soon as possible.

WOOLWICH
METROPOLITAN BOROUGH.

SENIOR ASSISTANT ARCHITECT.

Applications are invited for the above permanent appointment in the Borough Engineer's Department. Salary within Grade A.P.T. V (£1,310-£1,480) plus London weighting. Superannuation scheme.

Candidates must have passed the final examination of the R.I.B.A.

The Council has an extensive and interesting programme of works.

Applications, stating experience, qualifications and age, and giving names of two referees to Town Clerk, Woolwich, S.E.18, by 14th MARCH, 1961.

LEYTON
BOROUGH.

Applications invited for appointments of ASSISTANT ARCHITECTS. Salary within Grade A.P.T. III, £960-£1,140 per annum plus London Weighting. Housing accommodation will be provided. 5-day week. National Joint Council Conditions of Service.

A large and varied programme of capital works in hand or projected offers good opportunities of gaining experience.

Apply with details to Borough Engineer, Town Hall, Leyton, E.10, not later than 16th MARCH, 1961.

D. J. OSBORNE,
Town Clerk.

Town Hall,
Leyton, E.10.

BEXLEY
BOROUGH

BUILDING WORKS DEPARTMENT.

Applications are invited for the appointment of an INCENTIVE OFFICER at a salary in accordance with Grade III of the A.P.T. Division (£960-£1,140) plus London Weighting Allowance of £25 or £45 according to age. Applicants should have wide experience of the building trades. The person appointed will be required to set target hours for and operate an incentive bonus scheme.

Application forms and conditions of appointment obtainable from the Building Works Manager, Council Offices, Bexleyheath, Kent, to whom applications must be delivered not later than THURSDAY, 16th MARCH, 1961.

ARTHUR GOLDFINCH,
Town Clerk.

CARLISLE CITY.

CITY SURVEYOR'S DEPARTMENT.
PRINCIPAL ASSISTANT ARCHITECTS.

Applications are invited from qualified ARCHITECTS for the above posts. A great deal of interesting and sizeable work is in progress and projected. Salary according to A.P.T. V (£1,310-£1,480 per annum) and staff houses are available.

Application forms obtainable from the City Surveyor, 18 Fisher-street, Carlisle. Closing date noon on 20th MARCH.

H. D. A. ROBERTSON,
Town Clerk.

planning and rebuilding for the new London

There is a unique opportunity to combine public service with the highest possible professional standards for architects, architect/planners, structural engineers, building, quantity and planning surveyors, in the Architect's Department of the London County Council.

District Surveyors' Service — Structural engineers and building surveyors needed.

Modernisation, Adaptation, Rehabilitation — Architects and building surveyors needed.

New Building Programme—Architects and assistants needed to work on housing, schools, South Bank Development, hostels, old people's homes, etc.

Planning of London — Architect/planners and planning surveyors needed.

Structural Engineering Division — Structural engineers needed for design.

Quantities Division — Quantity surveyors, surveyors for cost planning and workers-up needed.

Voluntary Schools Section — Architectural assistants and building surveyors needed for work on church schools including the initiation of schemes, improvements and maintenance.

Building Regulation Division — Architects and building surveyors needed to examine applications to build, to deal with factory fire arrangements and to help with a campaign to eliminate the danger spots in London where fire risk is high.

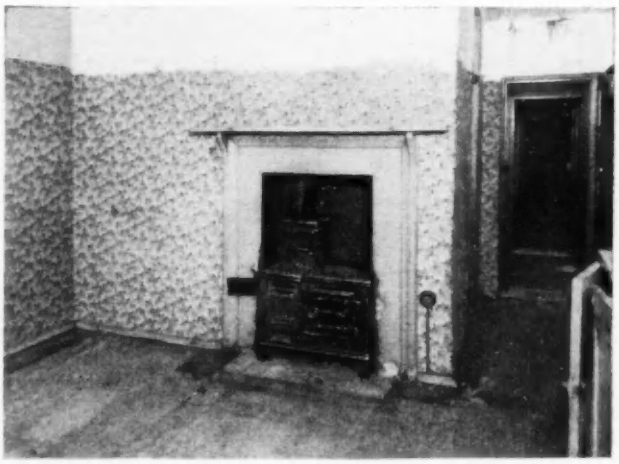
have you thought of joining the L.C.C.?

Whatever changes may result from the Royal Commission Report an enormous programme of work will have to be done and service with the L.C.C. now provides the best training ground for opportunities in the future.

- Promotion strictly on merit
- Flexible salary reviews within grades
- Permanency after probationary service
- Recognition grants for good work
- Starting salaries up to £1500 according to quality and experience

Please apply for application forms and further particulars to

Hubert Bennett, F.R.I.B.A., Architect to the Council, County Hall, S.E.1., quoting reference EK/428/3.



AIR MINISTRY.

Require QUANTITY SURVEYING ASSISTANTS, Grade III, at R.A.F. and Ministry of Aviation stations throughout the United Kingdom. The work includes abstracting and billing, site measurement and preparation of estimates. Candidates must hold O.N.C. (Building or Builders Quantities) or equivalent and have had good experience under Quantity Surveyor or Building Contractor. Knowledge of W.D. Schedule an advantage.

Commencing salary, which is dependent upon age, qualifications and experience ranges from £776 (age 25) to £961 maximum in Grade III. There are pension prospects and also opportunities of advancement to numerous posts in the higher grades, vacancies in which as a rule are filled by promotion of existing staff, viz.:

Technical Grade II: £961-£1,098. 123 posts.

Technical Grade I: £1,098-£1,348. 42 posts.

Technical Grade B: £1,348-£1,652. 6 posts.

Technical Grade A: £1,439-£1,697. 6 posts.

Overseas tours for which special allowances ranging at present up to £1,800 p.a. are payable in addition to a higher salary. Financial assistance and time off allowed for recognised courses of study leading to higher qualifications. Five-day week with 18 days' paid leave a year initially.

Applicants who must be natural born British subjects should write stating age, qualifications and experience to Manager (PE 2), Ministry of Labour, Professional and Executive Register, Atlantic House, Farringdon-street, London, E.C.4. Candidates selected will be interviewed in Air Ministry, London, and certain expenses reimbursed. Only applicants selected for interview will be advised.

NORTH RIDING
COUNTY COUNCIL.

Applications are invited for the following posts in the Architect's Department.

1. ASSISTANT ARCHITECTS, Grade A.P.T. III-IV. Salary £960-£1,310; must be A.R.I.B.A. with at least three years' experience since passing the Examination.

2. ASSISTANT ARCHITECTS, Grade A.P.T. II-III. Salary £815-£1,140; must have passed the Intermediate Examination of the R.I.B.A. Could be appointed on Grade A.P.T. III if Final Examination of R.I.B.A. has been passed.

3. ARCHITECTURAL ASSISTANT, Grade A.P.T. I. Salary £645-£815. Intermediate R.I.B.A. or equivalent at one of the recognised schools of Architecture.

Conditions of Service and Application Forms from R. Allport Williams, M.B.E., B.Arch., F.R.I.B.A., County Architect, County Hall, Northallerton, Yorkshire, and applications to be returned to R. A. Wotherspoon, Clerk of the County Council at the same address by 10 a.m., 24th MARCH, 1961.

WINCHESTER CITY.

Applications are invited for JUNIOR ARCHITECTURAL ASSISTANTS in the City Engineer's Department (C. C. Steptoe, A.R.I.B.A., Chief Assistant Architect) within Grades I-II (£645-£960) according to qualifications and experience. The appointments are subject to the terms and conditions laid down by the Southern Provincial Council and to the Local Government Superannuation Act.

Applications stating age, qualifications and experience, together with the names of two referees, addressed to the City Engineer, Guildhall, Winchester, should reach him not later than MONDAY, 13th MARCH, 1961.

The Council will assist in the provision of housing accommodation in suitable cases.

R. H. McCALL,
Town Clerk.

Guildhall,
Winchester.
17th February, 1961.

HARROW
BOROUGH.

TEMPORARY CLERKS OF WORKS required by the Borough Engineer to supervise painting contracts due for completion by 30th SEPTEMBER, 1961.

Salary £16 5s. per week.

Application forms are obtainable from me, to whom they should be returned not later than FRIDAY, 17th MARCH, 1961.

D. H. PRITCHARD,
Town Clerk.

Town Clerk's Office,
Harrow Weald Lodge,
Harrow,
Middx.

NORTH EAST METROPOLITAN
REGIONAL HOSPITAL BOARD.

CLERK OF WORKS.

A temporary CLERK OF WORKS will shortly be required to supervise contracts in the East London and Essex Areas. Salary within National Health Service range, i.e. £800-£1,050 per annum, dependent upon qualifications, etc., of successful applicant. Applications, stating age and experience, and accompanied by copies of three recent testimonials, to the Secretary, North East Metropolitan Regional Hospital Board, 40 Eastbourne-terrace, London, W.2, WITHIN 14 DAYS.

HESTON AND ISLEWORTH
BOROUGH.

APPOINTMENT OF DEPUTY BOROUGH ENGINEER AND SURVEYOR.

Applications are invited for the appointment of DEPUTY BOROUGH ENGINEER AND SURVEYOR at a salary in accordance with Scale D, namely, £1,710-£1,975 per annum. The successful candidate will be paid an allowance of £130 at the pleasure of the Council if he provides and maintains a motor-car for use in the performance of his duties.

Applicants must be qualified by examination for Corporate Membership of the Institution of Civil Engineers or the Institution of Municipal Engineers, and have had an extensive technical and administrative experience in all branches of a Municipal Engineer's Department, and be capable of taking charge of the organisation of such a department.

The appointment is subject to the Local Government Superannuation Acts, 1937-1953, the passing of a medical examination, and to termination by two months' notice on either side.

The Borough Engineer and Surveyor will be retiring within the following five years.

Forms of application and further particulars and conditions of the appointment may be obtained from the Borough Engineer and Surveyor, 88 Lampton-road, Hounslow.

Applications, enclosed in a sealed envelope, endorsed "Deputy Borough Engineer and Surveyor," must reach the undersigned not later than noon on FRIDAY, 17th MARCH, 1961.

D. MATHIESON,
Town Clerk.

Town Hall,
Hounslow,
Middlesex.

KIRKBY
URBAN DISTRICT COUNCIL.

CHIEF ARCHITECTURAL ASSISTANT.

Applications are invited for this appointment in the Engineer and Surveyor's Department. The post offers scope for wide experience and is the senior post in the architectural section of the department. Final R.I.B.A. or equivalent qualification required.

Salary: A.P.T. Grade V, commencing at £1,365 per annum. Five-day week. Assistance with housing and removal expenses considered. Casual user car allowance.

Applications, setting out full details of age, experience, qualifications, past and present appointments, salary, etc., and the names of two referees to me not later than the 13th MARCH.

Canvassing disqualifies. Relationship to be disclosed.

W. BYRON,
Clerk of the Council.

Kirkby Hall,
Hall-lane,
Kirkby.

OLDBURY
BOROUGH.

Applications are invited for the following appointment on the staff of the Borough Surveyor's Department:

ARCHITECTURAL ASSISTANT, Salary Grade A.P.T. III (£960-£1,140).

Candidates should be well trained and experienced in the design and preparation of schemes and supervising contracts in connection with general housing including multi-storey flats, public buildings, school buildings, and minor improvements and maintenance works.

The appointment will be superannuable subject to the National Conditions of Service and to the selected candidates passing a medical examination.

Applications giving particulars of age, qualifications, experience, and the names of two referees, should be delivered to the undersigned not later than the 10th MARCH, 1961.

KENNETH PEARCE,
Town Clerk.

Municipal Buildings,
Oldbury.
February, 1961.

WAKEFIELD CITY.

CITY ENGINEER'S DEPARTMENT.
TOWN PLANNING STAFF.

Applications are invited for the following superannuable appointments:—

(a) CHIEF TOWN PLANNING ASSISTANT, Grade A.P.T. IV (£1,140-£1,310).

The commencing salary will be according to qualifications and experience.

Applicants must be A.M.T.P.I. and will be required to take charge of the Town Planning Section of the Department. This appointment offers a good opportunity to those wishing to obtain further experience in all branches of Town Planning and in Town Planning administration.

(b) TOWN PLANNING ASSISTANT, Grade A.P.T. III (£960-£1,140).

Preference will be given to applicants who are A.M.T.P.I.

(c) JUNIOR TOWN PLANNING ASSISTANT, Grade A.P.T. I (£645-£815).

Applicants should preferably have had experience in a Town Planning office.

HOUSING ACCOMMODATION WILL BE PROVIDED IF NECESSARY IN RESPECT OF APPOINTMENTS (a) and (b).

A 5-day working week is in operation.

Applications stating age, qualifications and experience together with the names of two referees to be sent to the City Engineer, Town Hall, Wakefield, by the 10th MARCH, 1961.

LIVERPOOL REGIONAL HOSPITAL BOARD

require

ARCHITECTS

SENIOR ASSISTANT ARCHITECTS	£1,300—1,600
ASSISTANT ARCHITECTS	£905—1,310
ARCHITECTURAL ASSISTANTS	£625— 900
ARCHITECTURAL DRAUGHTSMEN	£475— 685

and

SURVEYORS

SENIOR ASST. QUANTITY SURVEYOR	£1,300—1,600
ASSISTANT QUANTITY SURVEYOR	£905—1,310
ASSISTANT BUILDING SURVEYORS	£905—1,310
BUILDING SURVEYING ASSISTANTS	£625— 900

to assist the Regional Architect, T. Noel Mitchell, B.Arch., F.R.I.B.A., to carry out the expanding Hospital Building Programme. Interesting new building is projected including new General and Specialised Hospitals and the complete replanning of a large number of older Hospitals covering a wide variety of building types.

All posts are superannuable and mileage allowances will be paid to approved car users. Applications to reach me within ten days stating post applied for, age, education, qualifications, experience, present and previous posts and names and addresses of three referees (two technical).

55, Castle Street,
Liverpool, 2.

VINCENT COLLINGE,
Secretary to the Board.

HUNTINGDONSHIRE
COUNTY ARCHITECT'S DEPARTMENT.

SENIOR QUANTITY SURVEYING ASSISTANTS
GRADE A.P.T. 4 (£1,140-£1,310).

Applications are invited from Chartered QUANTITY SURVEYORS for the above appointments which are additional to the existing staff. Candidates must be experienced in the preparation of bills of quantities, valuation of works in progress and settlement of final accounts.

Further details and application forms may be obtained from The County Architect, County Buildings, Huntingdon. Completed application forms should be returned to the undersigned by MONDAY, 13th MARCH, 1961.

A. C. AYLWARD,
Clerk of the County Council.

County Buildings,
Huntingdon.

SALFORD CITY.

Applications are invited from Chartered QUANTITY SURVEYORS for the post of ASSISTANT QUANTITY SURVEYOR in the department of the City Engineer and Surveyor (G. Alexander McWilliam, B.Sc., A.M.I.C.E., A.R.I.C.S., M.I.Mun.E.).

The salary will be within the Scales A.P.T. IV-V (£1,140-£1,480 per annum), dependent upon qualifications and experience.

The post is one of a team, within the Quantity Surveying Section, which will be responsible for extensive schemes on housing and central redevelopment, including multi-storey flats and new shopping precincts.

Housing accommodation may be provided in approved cases. A five-day week is in operation.

Applications stating age, education, qualifications, and experience, together with the names and addresses of two referees, should be sent to the City Engineer and Surveyor, Town Hall, Salford 3, Lancs, to arrive by the 14th of MARCH, 1961.

AIR MINISTRY.

Works Designs Branch, requires in LONDON and PROVINCES, ARCHITECTURAL ASSISTANTS with adequate training and drawing office experience. O.N.C. (Building) an advantage. Work includes site layouts, sketch plans, working drawings and details for variety of technical and domestic buildings in permanent and semi-permanent construction. Financial assistance and time off given for recognised courses of study. Promotion and pension prospects. 5-day week with 18 days' paid leave per year initially. Overseas tours for which special allowances granted.

Salary: in LONDON ranges from £836 (age 25)-£1,029 p.a., somewhat lower in PROVINCES. Commencing salary dependent on age, qualifications and experience. Applicants, who must be natural born British subjects, should write (quoting Kings Cross O/N 897) to Air Ministry, W.G.d., Lacon House, Theobalds-road, London, W.C.1, or to any Employment Exchange, giving age, details of training, qualifications, full particulars of former posts held and copies of any testimonials. Candidates selected will normally be interviewed in London and certain expenses reimbursed.

BRACKNELL
DEVELOPMENT CORPORATION.

Applications are invited for the following post in the Quantity Surveyor's section:—

JUNIOR QUANTITY SURVEYOR, A.P.T. Grade I, salary range £645-£815. Applicants should have passed the R.I.C.S. Intermediate examination (Quantities) or be up to that standard. Duties embrace Housing, Town Centre and Industrial buildings. Superannuation schemes, medical examination. Housing available.

Apply by 13th MARCH, 1961, stating age, education and qualifications, experience and appointments held (with dates and salaries), and names of two referees, to General Manager (Q.S.), Bracknell Development Corporation, Farley Hall, Bracknell, Berks.

COUNTY BOROUGH OF EAST HAM

ARCHITECTS

Applications are invited for the following temporary appointments:—

SENIOR ASSISTANT ARCHITECTS

SALARY: £1330-£1500

Salaries in excess of the minimum may be paid according to qualifications and experience. The appointments are for work on a new Technical College costing more than £700,000 and are expected to be for a period of not less than two years.

Further details and application forms, returnable by 17th March, 1961, from the Town Clerk, Town Hall, East Ham, E.6.

HARROW
BOROUGH.

Applications are invited for the following appointment in the Department of the Borough Engineer:

DEPUTY WORKS SUPERINTENDENT, A.P.T. Grade II (£815-£960 per annum, plus London "Weighting"). Commencing salary will be in accordance with qualifications and experience.

Applicants must have a sound experience of building construction and allied trades and be capable of supervising building works carried out by direct labour.

Experience in estimating and costing an advantage. Applicants should hold a current driving licence. A 42-hour week will apply.

A contribution towards removal expenses will be considered, if necessary.

Previous applications for this post will be reconsidered.

The appointment will be subject to the Local Government Superannuation Acts; and to the National Joint Council's Scheme of Conditions of Service.

Forms of application are obtainable from me, to whom they should be returned, not later than FRIDAY, 17th MARCH, 1961.

D. H. PRITCHARD,
Town Clerk.

Town Clerk's Office,
Harrow Weald Lodge,
Harrow, Middlesex.

GRAVESEND
BOROUGH.

APPOINTMENT OF CLERK OF WORKS (TEMPORARY).

Applications are invited from suitably experienced men for the above appointment within A.P.T. Grade II (£815-£960 per annum) according to age and experience.

Applications should be sent to the Borough Engineer and Surveyor, 6 Woodville-terrace, Gravesend, not later than MONDAY, 20th MARCH, 1961.

BURNLEY
COUNTY BOROUGH.

Applications are invited for the appointment of ASSISTANT ARCHITECT in the Borough Engineer and Surveyor's Department at a salary in accordance with A.P.T. Grade III/IV (£960-£1,310 per annum), commencing salary to be fixed in accordance with qualification and experience.

Five-day week. Housing accommodation will be provided if required.

Form of application, etc., may be obtained from the Borough Engineer, 22-24 Nicholas-street, Burnley, to whom applications must be returned not later than FRIDAY, 17th MARCH, 1961.

C. V. THORNLEY,
Town Clerk.

BARBICAN REDEVELOPMENT.

SITE SUPERVISOR OR CLERK OF WORKS.

A SENIOR SITE SUPERVISOR is required on 1st APRIL or earlier for the Barbican Redevelopment scheme shortly to begin in the City of London. The employment could extend over a period of 7 years.

As there will eventually be a small staff of clerks of works it is intended to engage at this time one of the senior staff to work in close collaboration with the architects in order that he may acquire a thorough knowledge of the nature and scope of the work as a whole. Applicants must have a wide experience in large scale building projects and professional qualifications in architecture, engineering or building surveying would be of value.

Applications should be addressed to Chamberlin, Powell & Bon (Barbican), 75-76 Little Britain, E.C.1, stating age, experience, qualifications and salary expected

HAMPSHIRE COUNTY COUNCIL

CHIEF QUANTITY SURVEYOR

Scale D/E (£1,710—£2,120) to take charge of new and existing staff of an expanding Section in the office of the County Architect (H. Benson Ansell, A.R.I.B.A.). Candidates must be A.R.I.C.S. and have had a wide experience of all branches of quantity surveying, including cost analysis and control, and be first rate administrators. Separation allowance and assistance with removal expenses in approved cases.

Application forms, returnable by 14th March, from the Clerk of the County Council, The Castle, Winchester.

WESSEX
REGIONAL HOSPITAL BOARD.

There are vacancies for the following posts in the Architect's Department to deal with the Board's expanding hospital building programme:

(a) PRINCIPAL ASSISTANT ARCHITECT, Grade II (£1,665 x £50(1) x £75(2) x £85(2)-£2,035).

(b) SENIOR ASSISTANT ARCHITECT (£1,300 x £60(5)-£1,600).

(c) ASSISTANT ARCHITECTS (£905 x £35(1) x £45(6) x £50(2)-£1,310).

Applicants must be Registered Architects. The work offers excellent opportunity for gaining experience in the whole field of hospital architecture and covers all stages from sketch plans to the supervision of construction. The proposed expansion of the Board's building programme ranges from major adaptation schemes to comprehensive new hospital projects, and includes all types of medical ancillary departments and domestic buildings.

(d) BUILDING OR QUANTITY SURVEYING ASSISTANT (£625 x £30(8) x £35(1)-£900).

Applicants must have passed the Intermediate Examination of the R.I.C.S. or an examination giving exemption therefrom.

Please apply to the Secretary, Highcroft, Romsey-road, Winchester, for application form which should be returned by 17th MARCH.

BIRMINGHAM CITY.

PARKS DEPARTMENT.
APPOINTMENT OF TECHNICAL OFFICER.

Applications are invited for the above appointment from persons holding a qualification in Surveying, Architecture or Engineering. The post is graded in accordance with A.P.T. Division Grade V (£1,310-£1,480 per annum).

The appointment will be subject to the provisions of the National Scheme of Conditions of Service as adopted by the City Council and varied from time to time, the Local Government Superannuation Acts, 1937-53, and will be terminable by one month's notice. The successful candidate will be required to pass a medical examination.

The person appointed will be required to assist and deputise for, when necessary, the Officer-in-Charge of the Sites and Buildings Section of the Department in connection with all appropriate professional and technical matters arising out of the supervision of all sites under the control of the Parks Committee and the maintenance of ancillary buildings connected therewith. Experience in landscaping will be taken into consideration.

A knowledge of Local Government procedure and organisation is an advantage.

Applications, together with the names of two referees, should be addressed to the General Manager, Parks Department, Civic Centre, Birmingham 1, to reach him not later than 12 NOON on MONDAY, 20th MARCH, 1961.

CENTRAL ELECTRICITY GENERATING BOARD.

MIDLANDS PROJECT GROUP.

Applications are invited for the following appointments at Sizewell "A" Nuclear Power Station, Suffolk.

(a) SECOND ASSISTANT ENGINEER (CIVIL).

Applicants should have considerable experience in design, construction and administration of large civil engineering works. The work will entail the supervision of deep excavations, tunnelling, off-shore headworks, foundations, reinforced concrete and general industrial building work.

Applicants should preferably hold an engineering degree and/or Associate membership of the Institute of Civil Engineers.

The salary for this appointment will be within Grade 5, Scale 15 of the National Joint Board Agreement, i.e. £1,400-£1,810 per annum.

Vacancy No. MPG. 10/61.

(b) THIRD ASSISTANT ENGINEER (CIVIL).

Applicants should have experience in design, construction and administration of large civil engineering works. The work will entail the supervision of deep excavations, tunnelling, off-shore headworks, foundations, reinforced concrete and general industrial building work.

Applicants should preferably be suitably qualified.

Vacancy No. MPG. 11/61.

The salary for this appointment will be within Grade 7, Scale 13, of the National Joint Board Agreement, i.e. £1,285-£1,610 per annum.

Applications for either appointment should be made on standard form AE6, available from the Administrative Officer, Midlands Project Group, P.O. Box No. 314, Birmingham 30, and should be forwarded to him so as to arrive not later than 20th MARCH, 1961.

Envelopes should be marked "Confidential" quoting the appropriate Staff Vacancy Number.

HOLBORN
BOROUGH COUNCIL.

TECHNICAL ASSISTANT required for about two years in Public Health Department, Holborn Borough Council. Inclusive salary within scale A.P.T. I (£685 to £855 p.a.). Practical experience in the building trade necessary. Full particulars, together with names of two referees, to Town Clerk, Town Hall, High Holborn, W.C.1.

LANCHESTER
COLLEGE OF TECHNOLOGY, COVENTRY

(Principal: A. J. Richmond, B.Sc.(Eng.), Ph.D., M.I.Mech.E.).

Applications invited for post of LECTURER IN BUILDING in Department of Civil Engineering and Building. Candidates should be Associates of Institute of Builders or professional Associates of Royal Institute of Chartered Surveyors, and be competent to teach Quantity Surveying to Building students as well as general Building subjects in advanced courses. The Department offers mainly courses of an advanced standard, i.e. H.N.C., H.N.D., and professional courses. Appropriate industrial experience necessary; previous teaching experience an advantage but not essential. Duties to commence as soon as possible.

Salary—£1,370 x £35(4) & £40(1)-£1,550 p.a. In certain circumstances the successful candidates may be paid commencing salary above minimum of scale.

Further particulars and application forms from The Registrar, Lanchester College of Technology, Priory-street, Coventry, to whom completed forms should be returned by 25th APRIL.

W. L. CHINN.

WARWICKSHIRE
COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments:—

(A) DEPUTY GROUP ARCHITECT, Grade "A" (£1,450-£1,565).

The post is one of responsibility requiring a high degree of initiative and design ability in all forms of construction. The person appointed will have to deputise for the Group Architect and must be a member of the R.I.B.A.

(B) SENIOR ASSISTANT ARCHITECTS, A.P.T. V (£1,310-£1,480).

Applicants should be members of the R.I.B.A. and be competent designers with a good knowledge of modern methods of construction. The persons appointed will be responsible for carrying out individual projects from sketch plan stage to completion.

(C) DEPUTY GROUP QUANTITY SURVEYORS, A.P.T. V (£1,310-£1,480).

Applicants should be chartered quantity surveyors capable of dealing with all types of building work. The group teams are responsible for all stages from the preparation of the estimates to the settlement of the final account.

(D) DEPUTY GROUP ENGINEER (HEATING), Grade "A" (£1,450-£1,565).

Applicants should be members of the I.H.V.E. and have had several years' experience in design, costing and handling large contracts for heating, water supplies and allied services.

(E) DEPUTY GROUP ENGINEER (ELECTRICAL), GRADE "A" (£1,450-£1,565).

Applicants should be members of the I.E.E. and have had several years' experience in design, costing and handling large contracts for lighting, power and allied services.

(F) SENIOR ASSISTANT ENGINEER (HEATING), A.P.T. IV-V (£1,140-£1,480).

Applicants should be Associate Members of the I.H.V.E. with some years' experience and competent to design and specify installations for major building schemes.

(G) ASSISTANT ENGINEER (HEATING), A.P.T. IV (£1,140-£1,310).

Applicants should be recently qualified engineers who are wishing to gain further experience in design of heating and allied services in association with a senior engineer.

(H) ENGINEERING INSPECTORS, A.P.T. III (£960-£1,140)

The successful applicants will be responsible for the inspection and maintenance of the heating, water supplies, electrical installations and allied services in buildings of a district of the County under the Assistant Maintenance Engineer. They should have had several years' experience either in a similar capacity or as foreman in charge of large contracts.

The commencing salary can be within the grades according to ability and experience. Five-day week worked. The Council have schemes for the payment of removal expenses and a lodging allowance to married officers.

Application forms and full conditions applicable to the appointments can be obtained from Eric Davies, F.R.I.B.A., A.M.T.P.I., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall,
Warwick.
February, 1961

IPSWICH
COUNTY BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT
APPOINTMENT OF ARCHITECTURAL ASSISTANT, GRADES A.P.T. III-IV (£960-£1,310).

Applications are invited for the above superannuated post at a commencing salary to be fixed in accordance with qualifications and experience.

Applicants should preferably have had Local Government experience and should be a Registered Architect.

Applications stating age, experience, etc. together with names of two referees must be received by the Borough Engineer and Surveyor, 19 Tower-street, Ipswich, by MONDAY, 20th MARCH, 1961. Canvassing will disqualify.

J. C. NELSON,
Town Clerk.

BRISTOL
CITY AND COUNTY.

EDUCATION COMMITTEE.
BRISTOL TECHNICAL COLLEGE.
DEPARTMENT OF BUILDING.

The Governors invite applications for two posts as GRADE B ASSISTANTS in the General Building Section.

(a) Building Construction and Technology.

(b) Building and Craft Science.

Applicants will be expected to teach principally in O.N.D. and O.N.C. courses, but may be expected to assist in advanced work. Burnham Technical Scale salary:

£700 x £27 10s and £37 10s. to £1,150, with graduate and training allowances where applicable.

Application forms and particulars from the Registrar, Bristol Technical College, Ashley Down, Bristol, 7. Please quote Ref. B.T.C. 61/2.

BATH CITY.

Applications are invited for the post of TECHNICAL ASSISTANT in the Corporate Property Department. Annual salary within the scale £645-£815.

Preference will be given to applicants who have passed the intermediate examination (building sub-section) of the Royal Institution of Chartered Surveyors or other approved institution.

The provision of housing accommodation will be considered.

Applications, giving details of age, education, qualifications and experience, together with the names of two referees, should be submitted to the Surveyor of Corporate Property, Guildhall, Bath, by 13th MARCH, 1961.

Canvassing disqualifies. Applicants must disclose whether they are related to any member or chief officer of the Council.

JARED E. DIXON,
Town Clerk.

Guildhall,
Bath.

MANCHESTER
REGIONAL HOSPITAL BOARD

Applications are invited for the following appointments in the Architectural Department:—

General Architectural Section:

(a) SENIOR ASSISTANT ARCHITECT, £1,300-£1,600 p.a.

(b) ARCHITECTURAL ASSISTANT, £625-£900 p.a.

(c) ARCHITECTURAL DRAUGHTSMAN, £475-£685 p.a.

Lands and Buildings Section:

(d) ASSISTANT SURVEYOR, £905-£1,310 p.a.

(e) SURVEYING ASSISTANT, £625-£900 p.a.

(f) ARCHITECTURAL DRAUGHTSMAN, £475-685 p.a.

Candidates for posts (a) and (d) should possess full professional qualifications and for posts (b) and (e), intermediate qualifications. Draughtsmen should have had at least three years' drawing office experience. All posts superannuable.

Application forms and particulars of appointments available from the Secretary, Manchester Regional Hospital Board, Cheetwood-road, Manchester, 8, to whom they should be returned by 27th MARCH, 1961.

STRETFORD
BOROUGH.

CLERK OF WORKS.
Grade A.P.T. I (£645-£815).

Applications are invited for the post of CLERK OF WORKS on the Corporation's several Housing Schemes. These include bungalows, houses, maisonettes and tower blocks. Applicants should have had several years' experience as Clerk of Works in addition to trade experience and should be capable of overseeing all branches of building work. Higher National Certificate in building would be an advantage. The commencing salary in the grade will be according to experience and qualifications.

The appointment is subject to the National Scheme of Conditions of Service and to the Local Government Superannuation Acts; also to one month's notice. The appointee's hours will be those normally worked by the building trade and he will supervise works on various sites in the Borough.

Housing accommodation will not be provided, nor removal expenses paid.

Application forms may be obtained from Mr. A. H. Perry, A.M.I.C.E., Borough Engineer, Town Hall, Stretford, to whom they should be returned by 13th MARCH, 1961.

C. TREWAVAS,
Town Clerk.

Town Hall,
Stretford.
22nd February, 1961.

ST. FRANCIS AND THE LADY CHICHESTER HOSPITALS
HOSPITAL MANAGEMENT COMMITTEE,
HAYWARDS HEATH, SUSSEX.

APPOINTMENT OF BUILDING SUPERVISOR.

Salary rising to £940 plus 6½ per cent or 10 per cent according to hours worked. Housing accommodation available. Applications by 18th MARCH, 1961. Full details from W. M. Hay, F.H.A., Group Secretary, St. Francis Hospital, Haywards Heath, Sussex.

SHEFFIELD CITY.

APPOINTMENT OF PRINCIPAL ASSISTANT ARCHITECT (CIVIC CENTRE).
Scale "C": £1,560-£1,825.

Applications are invited from experienced qualified Architects for this important POST on the permanent staff of the City Architect, Mr. J. L. Womersley.

The City Council have recently designated a spacious and attractive site, including the present Town Hall and Public Library, as a Civic Centre. The new buildings which are required will ultimately include a large extension to the Town Hall, new Law Courts, Police Headquarters and an Arts Centre. Following the preparation of a comprehensive scheme for the whole centre, the successful candidate's first task will be to design and execute the new Town Hall Extension which is urgently required.

Commencing salary within the above grade according to qualifications and experience.

Applications stating age, education and training, qualifications, present and past appointments (with dates and salaries), experience and the names of two persons to whom reference may be made, should reach me not later than the 20th MARCH, 1961.

JOHN HEYS,
Town Clerk.

NORTH-EAST ESSEX TECHNICAL COLLEGE.
Sheepen-road, Colchester.

Applications are invited for the following post:—

ASSISTANT LECTURER, Grade "B" in General Building subjects for Ordinary National Certificate in Building (and Higher National if required) with some ancillary craft work.

Qualified or qualifying surveyor preferred.

Salary scale £700 rising to £1,150 per annum. In determining the commencing salary, increments (£27 10s. 0d.) above the scale minimum will be allowed in respect of war/national service and previous industrial experience.

Details and application forms from the Clerk to the Governors to be returned WITHIN 14 DAYS of the appearance of this advertisement.

POOLE
BOROUGH.

Applications are invited for the following appointments in the Borough Architect's Department:

A. SENIOR ASSISTANT ARCHITECT, Grade A.P.T. IV (£1,140-£1,310).

B. ASSISTANT ARCHITECT, Grade A.P.T. III (£960-£1,140).

C. ARCHITECTURAL ASSISTANT, Grade A.P.T. II (£815-£960).

Applicants for Post A must be fully qualified and a high standard of design ability is required. In all cases the successful applicant will be engaged on a variety of projects which include a new Civic Centre and a programme of redevelopment including multi-storey flats.

Application forms from the Borough Architect, Municipal Buildings, Poole, Dorset, to be returned to me by SATURDAY, 18th MARCH, 1961.

J. G. HILLIER,
Town Clerk.

TAUNTON
BOROUGH.

ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments in the Borough Architect's Department:

ASSISTANT ARCHITECTS, Grade A.P.T. III-IV (£960-£1,140-£1,310 p.a.).

The Council have an interesting programme of estate development and redevelopment schemes including flatted accommodation, groups of shops, old persons' accommodation, market offices and other ancillary buildings.

The posts are superannuable, subject to medical examination and to National Conditions of Service. Salary placing according to qualifications and experience. Applications stating age, present position and salary, qualifications, experience and names of two referees to be sent to C. Bacon, Esq., F.R.I.B.A., Borough Architect, Flook House, Station-road, Taunton, within 14 days of the appearance of this advertisement.

Housing accommodation will be made available to suitable applicants if required.

K. A. HORNE,
Town Clerk.

MIDDLESEX
COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

(1) ASSISTANT ARCHITECTS, A.P.T. V (£1,355-£1,525) and A.P.T. III-IV (£1,005-£1,355) required. Established. Commencing salaries according to qualifications and experience. Department is divided into groups and there are good opportunities for architects with special design ability.

(2) BUILDING SURVEYORS, A.P.T. III (£1,005-£1,180) and A.P.T. II (£815-£960) plus London Weighting up to £40 required for preparation of schemes for minor alterations, etc. Established. Commencing salary according to qualifications and experience.

Both posts prescribed conditions.

Application forms from County Architect (s.a.e.), 1 Queen Anne's Gate Buildings, Dartmouth-street, S.W.1, returnable by Post (1) 13th MARCH, Post (2) 11th APRIL. (Quote F 682 B.)

ALDERSHOT
BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the position of ARCHITECTURAL ASSISTANT on the staff of the Borough Engineer and Surveyor at a salary in accordance with Grade A.P.T. III. Applicants should have passed the appropriate examination of the R.I.B.A. or possess a similar qualification.

The appointment will be subject to one month's notice on either side, to the provisions of the Local Government Superannuation Acts, and to the successful candidate passing a medical examination. Canvassing will disqualify.

Applications stating age, qualifications and experience together with the names and addresses of two referees should be sent to the Borough Engineer and Surveyor, Town Hall, Aldershot, not later than MONDAY, 20th MARCH, 1961.

Housing accommodation will be made available if required.

A five-day week is in operation.

H. B. SALES,
Town Clerk.

Town Hall,
Aldershot.
27th February, 1961.

NORTHERN IRELAND
HOUSING TRUST.

ARCHITECTS.

The Trust invites applications for the following posts:—

(1) ASSISTANT ARCHITECTS on scales £950-£1,300 (under review). Candidates must be Associates of The Royal Institute of British Architects.

(2) ARCHITECTURAL ASSISTANTS on scales £450-£950 (under review). Candidates should state their qualifications. Placing will be according to experience.

The persons appointed will be required to contribute to a superannuation scheme which allows for the transfer of benefits in local government schemes in suitable cases.

Housing accommodation may be arranged for married candidates.

Please apply not later than 31st MARCH, 1961, giving full details of age, education, qualifications and experience, including present post and salary, to the General Manager, Northern Ireland Housing Trust, 12 Hope-street, Belfast 12.

Please mark envelope (1) 33/90; (2) 43/91.

LEEDS CITY.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointment:—

ASSISTANT LAND SURVEYOR, Grade A.P.T. III. Salary Scale: £960-£1,140.

Candidates suitably qualified should be Land Surveyors and capable of undertaking large scale surveys.

The appointment is superannuable. Medical examination.

Application forms may be obtained from the City Architect, Priestley House, Quarry-hill, Leeds, 9, to whom they should be returned by 12 NOON on MONDAY, 20th MARCH, 1961.

Canvassing disqualifies.

Priestley House,
Quarry-hill,
Leeds, 9.
24th February, 1961.

AYLESBURY
BOROUGH.

TECHNICAL ASSISTANT,
A.P.T. III.

Required in the Housing Repairs Department, to assist in the administration of a Bonus Scheme for Direct Labour maintenance works and new building. The department is responsible for the maintenance of some 3,000 dwellings and contracts are in hand for the construction of 130 dwellings by direct labour. Applicants must be experienced and hold appropriate building qualifications. It is not unusual for the Council to provide housing accommodation in appropriate cases. Closing date 18th MARCH.

Applications should be made to E. H. Gascoigne, F.I.A.S., A.I.Hsg., Housing Repairs Officer, Clover-lane, Aylesbury, Buckinghamshire.

HESTON AND ISLEWORTH
BOROUGH.

Applications are invited for the appointment of a DRAUGHTSMAN/TRAINEE in the Architects' Section of the Borough Engineer and Surveyor's Department. Commencing salary will be in accordance with examination qualifications, ability and experience, but will not be less than £480 per annum at age 22. Maximum £560 or £730 per annum according to examination qualifications.

Applicants should have a good school record and be interested in architectural drawing.

The Council is unable to assist with housing accommodation.

Applications are to be submitted by 20th MARCH, 1961, on forms to be obtained from and returned to Borough Engineer and Surveyor, 88 Lampton-road, Hounslow.

D. MATHIESON,
Town Clerk.

Town Hall,
Hounslow,
Middlesex.

GLAMORGAN
EDUCATION COMMITTEE.

Required for September, 1961, or earlier if possible, at The Technical College, Bridgend. LECTURER in the Building Department, to be responsible for the teaching of Building Construction, Builders' Quantities, Building Services and Surveying to Advanced Level Applicants should possess qualifications in building, together with an associate membership of one of the following: Institution of Municipal Engineers; Institution of Chartered Surveyors; Institution of Quantity Surveyors; Institution of Builders.

Application forms obtainable from the undersigned on receipt of a stamped, addressed, foolscap envelope. Last date for receipt of completed forms is 13th MARCH, 1961.

EMLYN STEPHENS,
Director of Education.

County Hall,
Cardiff.

BERKSHIRE
ROYAL COUNTY.

CLERK OF WORKS to supervise the erection of a new Grammar School at Theale, near Reading. Salary 17 guineas per week.

The probable duration of the work is two years. Candidates must have had practical experience on large building contracts.

Preference will be given to those who have supervised the erection of new schools.

Application forms and further particulars can be obtained from the County Architect, Wilton House, Parkside-road, Reading.

The return date is the 14th MARCH, 1961.

NEWCASTLE UPON TYNE
CITY AND COUNTY.

Applications are invited from suitably qualified persons for the appointment of SENIOR QUANTITY SURVEYOR in the City Architect's Department at a salary in accordance with A.P.T. Division Grade IV (£1,140-£1,310 per annum).

Application forms and further particulars may be obtained on application in writing to George Kenyon, A.R.I.B.A., A.M.T.P.I., 18 Cloth Market, Newcastle upon Tyne, 1.

JOHN ATKINSON,
Town Clerk.

Town Hall,
Newcastle upon Tyne, 1.
24th February, 1961.

WEST HAM
COUNTY BOROUGH.

BONUS MEASURING ASSISTANT required. Must be experienced in measuring building works in all trades for incentive bonus. Salary—Misc. Grade V, £685 to £760 p.a. plus London Allowance of £25-£40 p.a. according to age.

Commencing salary within the above range according to experience.

Applications in writing, giving full particulars of experience, age, etc., to Borough Engineer, West Ham Town Hall, Stratford, E.15, immediately.

CAERNARVONSHIRE

Applications are invited for the following appointments:

ASSISTANT ARCHITECT:
APT. V—£1,310/£1,480

ASSISTANT ARCHITECT:
APT. III/IV—£960/£1,310

ARCHITECTURAL ASSISTANTS:
APT. II—£815/£960

Further particulars and application forms from:
Clerk of the County Council,
County Offices, Caernarvon.
Closing date, 25th March, 1961.

HENDON
BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments in the Borough Engineer and Surveyor's Department :—

CLERKS OF WORKS, Grade A.P.T. III (£1,005 to £1,185 per annum including London Weighting).

CLERKS OF WORKS, Grade A.P.T. II (£815 to £960, plus London Weighting of £40 per annum at age 26 and over).

Candidates must have a thorough knowledge of building contracts and a wide experience of the building trade generally. The appointments are for the supervision of a flatted factory (approximate cost £310,000), for which it is essential that the candidate should have experience in heavy R.C. structures, and for the supervision of general educational and housing projects, including multi-storey flats.

Permanent post. National Scheme. Medical Examination. Appointment terminable by one month's notice on either side.

Forms of application obtainable from the Borough Engineer and Surveyor, Town Hall, Hendon, N.W.4, to whom they must be returned by MONDAY, 13th MARCH, 1961.

R. H. WILLIAMS,
Town Clerk.

Town Hall,
Hendon, N.W.4.

FLINT
BOROUGH.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT in the Borough Engineer and Surveyor's Office. The salary will be A.P.T. Grade III.

The appointment will be subject to the provisions of the Local Government Superannuation Acts, the passing of a medical examination, the National Joint Council's Scheme of Conditions of Service, and one month's notice.

The post offers scope for interesting work on a varied programme including Redevelopment Schemes, Branch Library, Public Conveniences and Municipal Housing.

Housing accommodation will be provided if required.

A five-day week is in operation.

Applications, stating age, training, qualifications, details of previous and present appointments and experience and present salary, together with copies of two recent testimonials, should reach the undersigned not later than 2 p.m. on MONDAY, the 20th MARCH, 1961.

Canvassing in any form will disqualify.

WILLIAM McINTYRE,
Town Clerk.

Town Hall,
Flint.

COOKHAM
RURAL DISTRICT COUNCIL.

APPOINTMENT OF BUILDING INSPECTOR.

Applications are invited for the above appointment at a commencing salary of £815 per annum (A.P.T. Grade II, £815-£960). Duties will include examination of plans and inspection of buildings under Building Bye-Laws and Town and Country Planning Acts, 1947 to 1959, and such other duties as may from time to time be assigned to the successful candidate by the Council. Applicants should have a sound knowledge of all classes of building work and the possession of a Higher National Certificate in Building Construction will be an advantage. The person appointed must provide a motor-car for use in connection with his duties for which an allowance will be paid on the 10 h.p., or 1,199 c.c. scale.

A Council house will be made available, if required.

Applications, stating age, present position, qualifications and experience and giving names and addresses of two persons to whom reference may be made, must reach the undersigned by the 18th MARCH, 1961.

R. PAYTON WHEELER,
Clerk of the Council.

Council Offices,
Oaklands,
1 Bath-road,
Maidenhead.
2nd March, 1961.

WANDSWORTH
METROPOLITAN BOROUGH.

ASSISTANT SURVEYOR (BLD.).

Grade A.P.T. IV (£1,185 rising to £1,355). Applicants must be A.R.I.C.S. or equivalent, have had experience in a municipal surveyor's office and be capable of preparing specifications and drawings for small alteration works to public buildings. Forms from Borough Engineer returnable to me by 15th MARCH.

J. NOEL MARTIN,
Town Clerk.

Municipal Buildings,
Wandsworth, S.W.18.

FULHAM
BOROUGH COUNCIL.

BOROUGH ARCHITECT'S DEPARTMENT.

ASSISTANTS required within the salary scales £645-£1,140 plus £25-45 London weighting. Minimum requirements 2 years' continuous office experience and probationer of R.I.B.A. Commencing salary according to experience and qualification. Assisted training and promotion schemes. 5-day week. Details from Town Clerk, Town Hall, Fulham, S.W.6. Closing date 14th MARCH, 1961.

MAIDSTONE
BOROUGH.

APPOINTMENT OF CLERK OF WORKS (BUILDING).

Applications are invited from persons experienced in new construction, particularly houses and flats. HOUSING ACCOMMODATION if required. Salary within Grade A.P.T. II (£815-£960).

The appointment will be subject to the National Joint Council's Scheme of Conditions of Service and the Local Government Superannuation Acts.

Application forms, obtainable from the Borough Engineer, Palace-avenue, Maidstone, are to be returned to him by the 18th MARCH, 1961.

T. SCHOLES,
Town Clerk.

WEST MANCHESTER H.M.C.

PARK HOSPITAL, DAVYHULME.

WORKS ASSISTANT required in the office of the Superintendent Engineer and Building Supervisor. Duties will include the making of simple drawings and tracings and assisting in the preparation of specifications and estimates of cost. No specific qualifications are required but candidates should have a building or engineering background. Salary scale at age 26 or over £590 x £25 (4) to £690 per year for a working week of 38 hours. Leave entitlement three weeks plus bank holidays. For applicants under 26 years the salary scale is reduced. Application forms from the Group Secretary, Park Hospital, Davyhulme.

KESTEVEN
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

(a) ASSISTANT ARCHITECTS, A.P.T. III-IV (£960-£1,310).

(b) ARCHITECTURAL ASSISTANTS, A.P.T. I-III (£645-£1,140).

(c) ENGINEER'S ASSISTANT (ELECTRICAL), A.P.T. I-II (£645-£960).

Full particulars of the above appointments may be obtained from the County Architect, County Offices, Sleaford, Lincs.

Applications from suitably qualified persons, together with the names and addresses of two referees, should reach the undersigned not later than the 3rd APRIL, 1961.

J. E. BLOW,
Clerk of the County Council.

County Offices,
Sleaford,
Lincs.

BARROW-IN-FURNESS
COUNTY BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

SENIOR ARCHITECTS.

Applications are invited from qualified ARCHITECTS with suitable experience for two posts of :

SENIOR ARCHITECT, Grade 4, £1,140-£1,310.

The commencing salary will be fixed within the grade.

Housing accommodation available, alternatively subsistence allowances will be paid. Removal expenses reimbursed. Car purchase scheme in operation.

The Department works a 5-day week and has an interesting and varied programme of schemes.

Full details of the post, conditions of appointment and application forms may be obtained from the Borough Engineer and Surveyor, to whom completed forms must be returned not later than FRIDAY, 17th MARCH, 1961.

LAWRENCE ALLEN,
Town Clerk.

Town Hall,
Barrow-in-Furness.

BIRMINGHAM
REGIONAL HOSPITAL BOARD.

SENIOR ASSISTANT QUANTITY SURVEYORS. Salary scale £1,030-£1,050 per annum. Qualifications: Corporate Membership R.I.C.S. Superannuable. Five-day week. Apply (quoting Arch. 23) stating qualifications, age, experience, present position and salary and names of two referees, to Secretary, Birmingham Regional Hospital Board, 10 Augustus-road, Birmingham, 15, by 20th MARCH, 1961.

SLOUGH
BOROUGH COUNCIL.

BUILDING ESTIMATOR.

Applications are invited for the above appointment at a salary in accordance with Grade A.P.T. II (£815 rising to £960). Applicants must hold a current driving licence and possess a thorough knowledge of all building trades, contract procedure and pricing bills of quantities. It is also desirable that candidates should have had experience in negotiating targets for an incentive bonus scheme relating to all types of building work.

Reasonable removal expenses will be paid. Should the successful applicant be unable to secure housing accommodation within a reasonable distance of Slough he will, in an approved case, be granted a subsistence allowance of 37s. 6d. a week and train fare home every two months for a period not exceeding six months.

Applications, stating age, qualifications, experience, previous appointments and giving the names of two referees, to reach the Housing Manager, 34 Ledgers-road, Slough, not later than the 15th MARCH, 1961.

N. T. BERRY,
Town Clerk.

Town Hall,
Slough.

BRISTOL
CITY AND COUNTY.

CITY ARCHITECT'S DEPARTMENT.

Applications invited from persons with appropriate professional qualifications for the following permanent posts :—

ARCHITECTS :

(a) SENIOR ASSISTANT ARCHITECTS. Scale "A" (£1,360-£1,565).

(b) SENIOR ASSISTANT ARCHITECTS. Grade A.P.T. V (£1,310-£1,480).

(c) ASSISTANT ARCHITECTS. Grade A.P.T. IV (£1,140-£1,310).

(d) ARCHITECTURAL ASSISTANTS. Grade A.P.T. II (£815-£960).

(e) JUNIOR ARCHITECTURAL ASSISTANTS. Grade A.P.T. I (£645-£815).

(f) JUNIOR ASSISTANTS. General Division (starting salary at 18 not less than £320 p.a. on scale rising to £690 p.a. for applicants with University School Certificate or good G.C.E.).

Applicants for the Senior Architectural posts must hold appropriate qualifications and have had wide experience in Housing, Education or other types of large public building work. They will be required to design and work on projects to completion. Applicants will be considered on their capability for design, experience, contemporary outlook and suitability.

The department has an interesting and varied programme of work including the design and construction of Colleges of Art, Technology and Further Education; Secondary Schools, Markets, Baths, Libraries, and redevelopment projects including blocks of dwellings up to 15 storeys. Facilities will be available for design and contract experience and good opportunities exist for men with drive and initiative to assist in works of major architectural importance.

QUANTITY SURVEYORS :

(g) SENIOR QUANTITY SURVEYOR. Grade A.P.T. V (£1,310-£1,480).

(h) SENIOR QUANTITY SURVEYOR. Grade A.P.T. III or IV (£960-£1,140 or £1,140-£1,310).

(i) QUANTITY SURVEYOR'S ASSISTANT. Grade A.P.T. I (£645-£815).

Applicants for (g) and (h) should preferably be A.R.I.C.S. Applicants for (i) should preferably be of R.I.C.S. Intermediate standard.

Housing accommodation will be provided, if necessary, at an economic rent. Assistance with removal expenses for all posts except (a).

The department works a five-day week.

Details and application forms, returnable by 20th MARCH, from City Architect, Council House, Bristol, 1.

STAFFORDSHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

APPOINTMENT OF ASSISTANT STRUCTURAL ENGINEER.

Applications are invited from Chartered Structural Engineers for the ABOVE POST within Grade A.P.T. IV (£1,140-£1,310 per annum).

The Council may be able to assist with housing accommodation in cases of need, and also has a scheme for loans to employees wishing to purchase their own houses.

Good working conditions; assistance with removal expenses, etc.

Forms of application from P. Woodcock, F.R.I.B.A., County Architect, Green Hall, Lichfield-road, Stafford.

Closing date 27th MARCH, 1961.

T. H. EVANS,
Clerk of the County Council.

WEST SUFFOLK
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the post of ASSISTANT ARCHITECT within Grade A.P.T. IV (£1,140-£1,310 per annum).

Applicants must be qualified Architects and preferably have experience in Local Authority work.

The department can offer varied and interesting experience on Educational, Police and Health programmes.

N.J.C. Service Conditions; post pensionable; medical examination.

A five-day week is in operation; housing accommodation may be made available.

Application forms obtainable from the County Architect, 13 Westgate-street, Bury St. Edmunds, to be returned as soon as possible.

EASTERN ELECTRICITY BOARD.

NORTHMET SUB-AREA.
GENERAL ASSISTANT ENGINEER (CLERK OF WORKS).
CIVIL ENGINEERING AND BUILDING SECTION.
SUB-AREA ENGINEER'S DEPARTMENT (Ref. 1039).

Candidates should have had a good general and technical education, possess a sound knowledge of practical building and civil engineering construction and be capable of setting out and supervising site works.

Salary: N.J.B. Class N, Grade 16 (£940-£1,065) inclusive of London Allowance.

The successful candidate will be required to contribute to a superannuation scheme and may be required to undergo a medical examination.

Apply by letter to the Manager, Eastern Electricity Board, Northmet Sub-Area, Northmet House, Southgate, London, N.14, by 17th MARCH, 1961.

STEVENAGE
DEVELOPMENT CORPORATION.

Applications are invited for appointment as ASSISTANT ARCHITECT in the Chief Architect's Department on New Towns' Salary Grade A.P.T. III, £960-£1,140—starting salary according to qualifications and experience. Applicants should be Associates of the Royal Institute of British Architects and have experience in design and construction of modern buildings. Candidates who are taking final examinations shortly may be appointed in Grade A.P.T. II—£815-£960—and on qualifying be transferred to a higher vacancy.

Living accommodation will be available in an appropriate case. Local Government superannuation; five-day week.

Applications giving details of experience and the names of two referees should be sent to the Chief Administrative Officer, Daneshill House, Danestrete, Stevenage, Herts., *not later than 20th MARCH, 1961.*

HEREFORD CITY.

APPOINTMENT OF TEMPORARY CLERK OF WORKS.

Applications are invited for the following temporary appointment in the department of the City Architect :—

CLERK OF WORKS (£17 per week).

Applicants should have experience of Local Authority Housing work, and should be accustomed to carrying out general supervision and measuring for all trades.

Housing accommodation may be provided in approved cases.

Forms of application, which may be obtained from the City Architect, Town Hall, Hereford, should be returned to reach the undersigned not later than 12 NOON on MONDAY, the 20th day of MARCH, 1961.

J. A. WESTON,
Town Clerk.

Town Hall,
Hereford.

EAST BARNET
URBAN DISTRICT COUNCIL.

APPOINTMENT OF BUILDING INSPECTOR.

Applications are invited for the above permanent appointment at a salary in accordance with A.P.T. Grades II/III (£815 rising to £1,140) plus London Weighting. In addition, a car allowance of £100 per annum will be payable.

A five-day week is being operated for an experimental period of 6 months, commencing 1st April, 1961.

The Council are unable to provide housing accommodation.

Preference will be given to those applicants who hold the Building Inspector's Certificate of the Institution of Municipal Engineers.

Application forms are to be obtained from the Engineer and Surveyor, Town Hall, Station-road, New Barnet, Hertfordshire, and returned to him by not later than MONDAY, 20th MARCH, 1961.

WIMBLEDON
BOROUGH.

ARCHITECTURAL ASSISTANT, Grade A.P.T. II, £815 to £960, plus London Weighting. Form of application from Borough Engineer and Surveyor, Town Hall, Wimbledon, S.W.19. Returnable by 20th MARCH, 1961. Canvassing disqualifies.

BATTERSEA
METROPOLITAN BOROUGH.

Applications are invited for the permanent appointment of SAFETY OFFICER, Grade A.P.T. II, £815-£960 per annum plus London Weighting (£40 per annum at age 26 or over). Commencing salary will be according to qualifications and experience. Local Government experience is not essential.

This is a new post and the person appointed will be responsible to the Borough Engineer and Surveyor for seeing that the necessary safety precautions are taken on the Council's Building and Civil Engineering Works, but further duties may be assigned in relation to maintenance and distribution of plant.

Application forms and further particulars obtainable from Borough Engineer and Surveyor, Town Hall, Battersea, S.W.11.

Closing date 27th MARCH, 1961.

EAST HAM
COUNTY BOROUGH.

SENIOR ASSISTANT ARCHITECT, A.P.T. IV, £1,185-£1,355.

Salary in excess of the minimum may be paid according to qualifications and experience. A subsistence allowance may be granted over a reasonable period to the person appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Further details and application forms returnable by 17th MARCH, 1961, from the Town Clerk, Town Hall, E.6.

BRACKNELL
DEVELOPMENT CORPORATION.

Applications are invited for the post of ASSISTANT CLERK OF WORKS in the Chief Architect's Department. Salary range £815-£960. Housing available. Superannuation scheme, medical examination.

Apply by 9th MARCH, stating age, experience and appointments held (with dates and salaries) and names of two referees, to General Manager (C.W.A.), Bracknell Development Corporation, Farley Hall, Bracknell, Berks.

GUIDE TO BUYING AND SPECIFICATION

Display Rate 30/- an inch

Name & address only 5/- ; extra words 3d. Bold Type, 7/- ; extra words 6d. Telephone Number 6d. extra

Use Expandite Sealing Compounds, Seelastik, Asbestumen or Expandite Extrusions Seel-A-Strip R.B.208.
EXPANDITE LIMITED
Chase Road, London, N.W.10. Tel: ELGar 4321 (10 lines)

EXCEL ASPHALTE CO. LTD
Telephone RIVERSIDE 6052 (5 lines)
BROADWAY CHAMBERS, HAMMERSMITH, LONDON, W.6

H.V. SMITH & CO. LTD
ASPHALT
ROOFING
TANKING
FLOORING
WALKDEN HOUSE, MELTON STREET, N.W.1.
EUSton 9292

SALTER, EDWARDS & CO. LTD
ASPHALTERS
LONDON, W.9 Phone: LAD. 1039

ODDI ASPHALTE
ROOFING SPECIALISTS
FLOORING
TANKING
TARPAVING
Phone: VANdyke 3644
255, GARRATT LANE, LONDON, S.W.18

TRINIDAD LAKE ASPHALT
for all good building work
PREVITÉ & Co. LTD
CAPEL HOUSE
54 NEW BROAD ST., LONDON, E.C.2
Telephone : LONDON WALL 4313

ACOUSTIC PANELS
"Seco" Selection Construction Co., Ltd. Langham 7931.
Bowater Sales Co., Ltd.

AGGREGATES (HEAVY)
United Chemicals (London), Ltd.

AIR INLETS (AUTOMATIC)
W. G. PARSONS & SONS, BARBARA CLOSE, ROCHFORD, ESSEX. MANUFACTURERS OF THE "DRAUGHT-MASTER" AND "FLUE-MASTER" WARM FLOW AUTOMATIC AIR INLET-UNITS.

ALUMINIUM CORRUGATED SHEETS
Chalfont Clasps, Ltd.

ALUMINIUM PRODUCTS
ALCAN INDUSTRIES, LTD., FORMERLY NORTHERN ALUMINIUM CO., LTD.
THE BRITISH ALUMINIUM CO., LTD.

ALUMINIUM ROLLER SHUTTERS
J. TAYLOR (SYSTON), LTD., Janus Works, Albert Street, Syston, Leicester. Tel. Nos.: Syston 2133, and Manchester, Ringway 3996.

ANTI-CONDENSATION SHEETS
JABLO Plastics Industries, Ltd., Mill Lane, Waddon, Croydon, Surrey.

ANTI-FREEZERS
Sealocrete Products, Ltd. Tretol, Ltd.

ARCHITECTURAL IRONMONGERY
Edward Farr, Ltd.

ARTIFICIAL STONE MANUFACTURERS
MALCOLM MACLEOD & CO., LTD., GLEN ROAD, WALTHAMSTOW, LONDON, E.17. TELEPHONE : COPPERMILL 1147-8.
ENFIELD STONE CO., LTD., GREEN STREET, BRIMSDOWN, ENFIELD, MIDDX. TEL.: HOWARD 2618.
CAMBRIDGE ARTIFICIAL STONE CO., LTD., 121B, MILL ROAD, CAMBRIDGE.

ASBESTOS CEMENT PRODUCTS
ASBESTOS CEMENT & INSULATIONS LTD., 36, VICTORIA STREET, S.W.1. Tel.: SULLIVAN 4285/6/7.
HARRISON & CO. (BUILDERS' MERCHANTS), LTD., LEYTONSTONE, LONDON, E.11, (LEY. 5851.) Corrugated and Flat Sheets, Rainwater and Flue Goods. (Supplied and fixed, or supplied only.)
HINE LIMITED, BEDFORD ROAD, LONDON, S.W.4. BRIXTON 1127.
Asbestos Cement Roofings (London), Ltd. Atlas Stone Co., Ltd. Expandite, Ltd.

ASPHALT
PERMANITE, LTD., 455, OLD FORD ROAD, LONDON, E.3. ADVANCE 4477 (20 lines).
METROPOLITAN ASPHALTE CO., LTD., The, Boreham Wood, Herts. Tel.: Elstree 1152/3.
RUSSELL Asphalte Co., Ltd., The, 14-16, Bath Road, Eastbourne. Tel.: Eastbourne 4148.
ASPHALTIC (LONDON), LIMITED, 206, UPPER STREET, LONDON, N.1. TEL.: CANONBURY 5550.
THE IMPROVED ASPHALTE CO., LTD., 45/51, NEPTUNE STREET, S.E.16. TELEPHONE : BERMONDSEY 4080.
Associated Asphalte Co., Ltd. Pitchmastic & Asphalte (Manufacturing) Co., Ltd.
Excel Asphalte Co., Ltd. Previte & Co., Ltd.
General Asphalte Co., Ltd. Smith, H. V., & Co., Ltd.
Oddi Asphalte. Southern Asphalt, Ltd.
Paramount Asphalte, Ltd.

ASPHALT PAVIORS
Wm. SALTER, Edwards & Co., Ltd., Hormead Wharf, Hormead Rd., Harrow Rd., London, W.9.
General Asphalte Co., Ltd. Neuchatel Asphalte Co., Ltd.
Metropolitan Asphalte Co., Ltd.

BARROW MAKERS
Acrow (Engineers), Ltd. Cayless Bros.
Randow Millman, Ltd. Stephens & Carter, Ltd.

BATHS
Clark, Hunt & Co., Ltd. Nicholls & Clarke, Ltd.

BITUMEN SHEETING
PERMANITE, LTD., 455, OLD FORD ROAD, LONDON, E.3. ADVANCE 4477 (20 lines).
Field & Palmer, Ltd. Ruberoid Co., Ltd.
McNeill, F., & Co., Ltd.

SOUTHERN ASPHALT LTD
15 SHIP STREET · BRIGHTON
SUSSEX. Tel.: Brighton 24905
Mastic Asphalt & Felt Roofing

PARAMOUNT ASPHALTE LTD
For Roofs, Dampcourses and Coloured Asphalte Floors
149 Kennington Park Rd. S.E.11 Tel: RELiance 2373, 2191

For all Joints in Concrete Structures and Waterproofing consult
EXPANDITE LIMITED
Chase Road, London N.W.10. Tel: ELGar 4321 (10 lines)

DANAURA *Blinds*
VENETIAN BLINDS BY SPECIALISTS
DANAURA LTD. 52a, CHASE SIDE, SOUTHGATE, LONDON, N.14. FOX Lane 0018 (PBX).

BLINDS
FOR ALL PURPOSES
E. HIRSCHHORN & CO. LTD.
FINSBURY WORKS, WOOD GREEN, N.22
Phone: BOWES PARK 3411
SHUTTERS
WOOD and STEEL

CHIMNEY SHAFTS
BOILER SETTINGS
CHIMNEY REPAIRS
TOPPING & LEGGAT
13 OLD PARK ROAD, N.13
'Phone: Palmers Green 3288
'Grams: "Smokechim, Wood"

BUILDERS OF BRITAIN'S LARGEST BRICK CHIMNEY
450 ft. High x 20 ft. Internal Diam. at top.
P. C. Richardson & Co. (Middlesbrough) Ltd.
52-58 Fletcher Street, Middlesbrough
Telephone 45904/5

BITUMINOUS SOLUTION MAKERS, Etc.
EXPANDITE LTD., Chase Road, London, N.W.10.
"Cuirass" British Bye-Products, Ltd.
Dunsek Bitumen & Tarolewum, Ltd.
Maxwell, Andrew.
Permanite, Ltd.
Ruberoid Co., Ltd.
Sealocrete Products, Ltd.
Tretol, Ltd.

BLINDS, WINDOW, Etc.
Danaura, Ltd.
Hirschhorn, E., & Co., Ltd

BLOCKS (ROPE)
CHARLES BUTTERFIELD, LTD., SOBRAON WORKS, STRATFORD, E.15.

BOILER SETTERS
Poulton & Son, Ltd.
Nu-Way Heating Plants, Ltd.

BRICK MACHINERY MFRS.
SUTCLIFFE, Speakman & Co., Ltd., Leigh, Lancs. London office: 2, Caxton Street, Westminster, S.W.1.

BRICK HANDLING EQUIPMENT
Broads Manufacturing Co., Ltd.

BRICKS
C. A. HARDING & CO., (BRICKS), LTD., Blackford House, Mulgrave Road, Sutton, Surrey.
Accrington Brick & Tile Co., Ltd.
Eastwoods Sales, Ltd.
Midhurst Whites, Ltd.
Sussex & Dorking United Brick Co., Ltd.

BRICKS (FACING)
Walley, T. E., Ltd.

BRICKWORK REINFORCEMENT
"Brickforce" B.R.C. Engineering Co., Ltd.
Expanded Metal Co., Ltd.
"Bricktor" Johnson's R.C. Engineering Co., Ltd.

BUILDERS & CONTRACTORS
MULLEN & LUMSDEN, LTD. (See displayed advertisement). MULLEN & LUMSDEN MAINTENANCE, LTD., 5, COPTIC STREET, W.C.1. (Telephone: MUSeum 3705.)
"Seco" Selection Construction Co., Ltd. Langham 7931.
Batty & Smith, Ltd.
Demolition and Construction Co., Ltd., The
Falkus Bros., Ltd.
Galbraith Bros., Ltd.
Gaze, W. H., & Sons, Ltd.
Greenaway & Sons, Ltd.
Higgs & Hill.
Laing, J., & Son, Ltd.
Lovell, Y. J., & Son, Ltd.
Negus, W. & M., Ltd.
Rush & Tompkins, Ltd.
Tersons, Ltd.
Trollope & Colls, Ltd.
Truett & Steel, Ltd.

BUILDERS' EQUIPMENT
Kwikform, Ltd.

BUILDERS' IRONWORK
A. H. Allen (Engineers), Ltd.
Edward Farr, Ltd.

BUILDERS' MERCHANTS
C. COLLIN LTD., The Glass House, High Street, Croydon. Tel.: CRO 2134 (4 lines) and CRO 8321.
Clark, Hunt & Co., Ltd.
Eastwoods Sales, Ltd.
Nicholls & Clarke, Ltd.
Travis & Arnold, Ltd.

BUILDING PAPER
EXPANDITE LTD., Chase Road, London, N.W.10.
Davidson, C., & Son, Ltd.

BUILDING SLABS
"Seco" Selection Construction Co., Ltd. Langham 7931.
"Marlith" Marley Tile Co., Ltd.

CASKS, BARRELS & WATER BUTTS
HAIG'S Cooperages, Ltd., Bank Chambers, Tower Bridge, Tooley Street, London, S.E.1.

CAST STONE
Celcon, Ltd.

CEMENT
Eastwoods Sales, Ltd.

CEMENT PAINTS
SIKA, LTD., No. 7, BUCKINGHAM GATE, S.W.1. VICTORIA 3693/4 and 0666.
SEALOCRETE PRODUCTS LTD., Atlantic Works, Hythe Road, N.W.10. Tel.: Ladbroke 0015/6/7.

CHAINS & SLINGS
CHARLES BUTTERFIELD, LTD., SOBRAON WORKS, STRATFORD, E.15.

CHIMNEY BUILDERS & REPAIRERS
FURSE, W. J., & Co., Ltd., ("S" Dept.), Traffic St., Nottingham; also London, Manchester, Bristol.
Chimney Construction Co., Ltd.
Chimneys, Ltd.
C. & M. Engineering Co., Ltd.
Edward Farr, Ltd.
Gray, J. W., & Son, Ltd.
Richardson, P. C., & Co. (Middlesbrough), Ltd.
Topping & Leggatt.

CHIMNEYS LIMITED
EST. 1915
351a LOWER ADDISCOMBE RD.
CROYDON, SURREY
'Phone: ADDiscombe 1113-4
'Grams: "Chimneys Croydon"

TETLEY & SON LTD.,
The Brewery, Leeds
CONCRETE HARDENING
and
WATERPROOFING SOLUTION
Proved over 30 Years
for
Hardening
Quick Setting
Non-Dusting
Waterproofing
Non-Cracking
Anti-Freezing
Full particulars and prices from :—
CARTER INDUSTRIALS LTD.,
2, Friars Lane, Richmond, Surrey
Tel.: RIChmond 5934
Send for latest Stanger Report.

STEPHENS & CARTER LTD
SCAFFOLDING CONTRACTORS
731-761, Harrow Road, N.W.10
Tel: LADbroke 1191 (7 lines)
HIRE · ERECTION · SALE

'IYDROSHANTI'
CONCRETE TOUGHENER AND
WATERPROOFING COMPOUND
An Efficient Concrete Toughener
SPECIFY and USE
"IYDROSHANTI" for
Hardening Concrete
Waterproofing Concrete
Dampcoursing
Damp Walls
Repairing Concrete Walls etc.
E. WADE WILTON & SON
Planet Works, Houghley Lane, Bramley, Leeds
Grams: Wilton, Bramley, Leeds Phone: Pudsey 3336

NICOLL, DAWSON
& HUMPHRIES LTD
Scaffolding Contractors
1, SOUTHERN GROVE
MILE END E.3
Phone: ADVance 1927

SHEPHERD'S BUSH 2377
CRADLE-SCAFF LTD
6, 7 & 8, PERCY PLACE,
SHEPHERD'S BUSH, W.1.

CHURCH SPIRE & TOWER RESTORERS
FURSE, W. J., & Co., Ltd., ("S" Dept.), Traffic St., Nottingham; also London, Manchester, Bristol.
GRAY, J. W., & SON, LTD., Tudor House, 1, Princeton St., Bedford Row, W.C.2. Tel.: Cha. 8701-2, and 13, Castle Street, Salisbury. Sal. 2750.

CILLS, COPINGS, SHELVES, Etc.
BROUGHTON MOOR Green Slate Quarries, Ltd., Coniston, Lancashire.
KIRKSTONE GREEN SLATE QUARRIES, LTD., SKELWITH BRIDGE, AMBLESIDE, WESTMORLAND.

CLADDING
"Seco" Selection Construction Co., Ltd. Langham 7931.
B.I.P. Reinforced Products, Ltd.

CLAMPS (STEEL ADJUSTABLE)
Acrow (Engineers), Ltd.

CLINKERS & ASHES
Cloke, Geo. E., Ltd.

CLOTHES LINES (FRAME TYPE)
CROMPTON COLLING, LTD., Engineers, Frinton-on-Sea, Essex.

CLOTHES LOCKERS
Edward Farr, Ltd.

CLOTHES LOCKERS (STEEL)
Abix (Metal Industries), Ltd.

COAL BUNKERS (CONCRETE)
Associated Building Constn. Dev. (Raynes Park), Ltd.

COLOURS FOR CEMENT, CONCRETE ROUGH CAST
SEALOCRETE PRODUCTS LTD., Atlantic Works, Hythe Road, London, N.W.10. Manufacturers of Sealantone Products.
Freeman, Joseph, Sons & Co., Ltd.
Sal-Ferricite & Trading Co., Ltd.

CONCRETE CONSTRUCTION
Helical Bar & Engineering Co., Ltd.

CONCRETE FLOOR DUSTPROOFING
SIKA, LTD., No. 7, BUCKINGHAM GATE, S.W.1. VICTORIA 3693/4 and 0666.
Adamite Co., Ltd.
Byrd, A. A., & Co., Ltd.
Kerner-Greenwood & Co., Ltd.
Lillington, Geo., & Co.,
Sealocrete Products, Ltd.
Steel-Crete, Ltd.
Szerelmey, Ltd.
Tretol, Ltd.
Watco (Sales), Ltd.

CONCRETE FLOOR SURFACER
Colombus-Dixon Organisation, The

CONCRETE MIXERS
DOE, ERNEST, & SONS, LTD., Industrial Division, Ulting, Essex. Tel.: Hatfield Peverel 311 (12 lines). Night Tel.: Hatfield Peverel 319.
HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines).
WARD, THOS. W., LTD., ALBION WORKS, SHEFFIELD, P.O. BOX 141.
AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8 MACaulay 2233.
Acrow (Engineers), Ltd.
Millars Machinery Co., Ltd.
Vales Plant Register, Ltd.

CONCRETE PILING
Lind, Peter, & Co., Ltd.
Simplex Concrete Piles, Ltd.

CONCRETE POURING SKIPS
ABELSON & CO. (ENGINEERS), LTD., SHELDON, BIRMINGHAM. Tel.: SHELDON 2424.

CONCRETE REINFORCEMENT
Expanded Metal Co., Ltd.
Jones, T. C., & Co., Ltd.
Helical Bar & Engineering Co., Ltd.

CONCRETE SHUTTERING
Acrow (Engineers), Ltd.
Byrd, A. A., & Co.
Mills Scaffold Co., Ltd.

CONCRETE TOUGHENER
Carter Industrials, Ltd.
Ironite Co., Ltd.
Lillington, Geo., & Co., Ltd.
Sal-Ferricite & Trading Co., Ltd.
Watco (Sales), Ltd.
Wade, Wilton, E., & Son

CONCRETE WATERPROOFING
SIKA, LTD., No. 7, BUCKINGHAM GATE, S.W.1. VICTORIA 3693/4 and 0666.
Expandite, Ltd.
Sealocrete Products, Ltd.
"Stic B" Paint Sales Ltd.
Tretol, Ltd.

CONSTRUCTIONAL STEELWORK
"Seco" Selection Construction Co., Ltd. Langham 7931.
C. & S. Construction Co. Ltd.
Croggon & Co., Ltd.
Edward Farr, Ltd.

PALMERS TRAVELLING CRADLE & SCAFFOLD Co. Ltd.
London Address: 3 WOODSIDE GREEN, S.E.25
Tel: Addiscombe 7721-4
Northern Address: 211, BOROUGH ROAD, MIDDLESBROUGH: Tel: Middlesbrough 3051.

CONSTRUCTIONAL STEELWORK
by
Croggon
CROGGON & CO. LTD.
ESTABLISHED 1835
Peyle Steelworks, Colnbrook, Nr. Slough
London · Liverpool · Glasgow

GET IN TOUCH WITH... BCM
SLAB AND GRANULATED
CORK
Trade Mark
BRITISH CORK MILLS LIMITED
"B.C.M." House, 9 Hobart Place, London, S.W.1
Tel. SLOane 7207-9 And at GLASGOW · DUBLIN · LISBON

ASHES & HARDCORE DEMOLITION
PLANT HIRE & HEAVY HAULAGE
GEO. E. CLOKE LTD.
NEASDEN LANE, N.W.10.
DOLlis Hill 7777 PBX

Five years ago—

"It cost us £60 to excavate and clear a blocked drain which had defied all other methods of clearing it. The same drain became blocked again this year, but this time we cleared it with the 'Sani-Snake,' which costs little, did the job on the spot, and has saved money ever since."
Write for illustrated leaflet
Made specially to work round traps and bends
Charles C. Grey
20/21 Tottenham Mews, London, W.1

CONTRACTORS' PLANT
DOE, ERNEST, & SONS, LTD., Industrial Division, Ulting, Essex. Tel.: Hatfield Peverel 311 (12 lines). Night Tel.: Hatfield Peverel 319.
HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines).
PARDIX PLANT, LTD., 62/72, High Street, Cheshunt, Herts. Telephone: Waltham Cross 23496 and 24913.
WARD, THOS. W., LTD., ALBION WORKS, SHEFFIELD, P.O. BOX 141.
AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.
Abelson & Co. (Engineers), Ltd.
Acrow (Engineers), Ltd.
Chamberlain Industries, Ltd.
Clifton, I., & Sons, Ltd.
Cohen, Geo., Sons & Co., Ltd.
Cox, H., & Sons (Plant Hire), Ltd.
Dandridge, A. F., Ltd.
Jones, T. C., & Co., Ltd.
Lewis & Lewis, Ltd.
Mills Scaffold Co., Ltd.
Vales Plant Register, Ltd.

CONTRACTORS' TOOLS
Clifton, I., & Sons, Ltd.

COPPER CYLINDERS
Manchester Tinning Co., Ltd.

COPPER TUBES
Bolton, Thomas, & Sons, Ltd.

CORK SLAB MAKERS
British Cork Mills, Ltd.

CORRUGATED SHEETS
Braby, Fredk., & Co., Ltd.
Croggon & Co., Ltd.
Jones, T. C., & Co., Ltd.

COWLS
Colt, W. H. (London), Ltd.

CRADLE (TRAVELLING)
BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551 (3 lines). WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367 (2 lines).
AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.
PETER COX CRADLING CO. Grosvenor 2023.
Acrow (Engineers), Ltd.
Boulton Scaffolding, Ltd.
Cradle-Scaff, Ltd.
Nicholl, Dawson & Humphries, Ltd.
Palmers Travelling Cradle & Scaffold Co., Ltd.
Saygus Scaffolders, Ltd.
Stephens & Carter, Ltd.
Tellok Appliances, Ltd.

CRANE MANUFACTURERS
A.C.E. Machinery Ltd.
British Hoist & Crane Co., Ltd.
Caswell Cranes & Erection, Ltd.
Cohen, Geo., Sons & Co., Ltd.
Delta (Plant), Ltd.
Morgan, A., & Co.
Record Tower Cranes (G. R. V. Briere)
Ward, Thos. W., Ltd.

CRANES (FOR HIRE)
CASWELL Cranes & Erection, Ltd., Grove Works, Hammersmith Grove, W.6. Tel.: Riverside 5203-4.
Cohen, Geo., Sons & Co., Ltd.
Jones, T. C., & Co., Ltd.
Lewis & Lewis, Ltd.
Vales Plant Register, Ltd.

CURTAIN WALLING (ALUM & STEEL)
John Williams of Cardiff, Ltd.

CYCLE PARKS
Abix (Metal Industries), Ltd.
Edward Farr, Ltd.
Odoni, Alfred A., & Co., Ltd.
Stelcon, Ltd.

DAMP-PROOF COURSES
SMITH, H. V., & CO., LTD., 24 Ashley Place, Westminster, S.W.1.
PERMANITE, LTD., 455, OLD FORD ROAD, LONDON, E.3. ADVANCE 4477 (20 lines).
DAMPCOURSE INSERTION. Midland Dampcoursing Co., Ltd., 45, Wyle Cop, Shrewsbury.
Anderson, D., & Sons, Ltd.
Blackwells & National Roofings, Ltd.
General Asphalte Co., Ltd.
Kerner - Greenwood & Co., Ltd.
Limmer & Trinidad Lake Asphalt Co., Ltd.
McNeill, F., & Co., Ltd.
Newtonite, Ltd.
Ruberoid Co., Ltd.

DECORATIVE PAINTING CONTRACTORS
British Bitumen Emulsions, Ltd.

DEMOLITION
JOHN BEESTON & CO., LTD. Tel.: DERBY 43686.
Cloke, Geo. E., Ltd.

DISTEMPERS
Morse, A. T., Sons & Co., Ltd.

LEANDER — THE BETTER INTERWOVEN FENCING
Joiner made from imported softwood, with slats ¼" thick. Strongest panels available.
Also OAK GATES.
Discounts to Builders, etc.
Brochures free.

B. LEANDER PRODUCTS, LTD., BURTON-ON-TRENT

FENCING
SUPPLY and FIX or SUPPLY ONLY
BERNARD HOLT LTD.
Moorbridge Works, Bestwood Road, Bulwell,
NOTTINGHAM
(Phone: 27-1461)

FENCING
CONTRACTORS
W. A. SKINNER & Co. Ltd. (Dept. B)
CITY WHARF, LONG DITTON, SURREY
Telephone: Emberbrook 1960-1961 (2 *lines*)

FENCING
OF ALL TYPES
SUPPLIED & ERECTED
BY
THE IVANHOE FENCING COMPANY
Arcadia Works
55 Whitton Road, Hounslow
HOUnslow 3140

WIRE FENCING
CROGGON & CO. LTD ESTABLISHED 1835
London · Liverpool · Glasgow · Colnbrook
Croggon

Use Expandite Joint Fillers and Sealers, Flexcell, Pil-astic Elastite, Vertistrip, Plastijoint and Expandite Mechanical appliances.
EXPANDITE LIMITED
Chase Road, London, N.W.10. Tel: ELGar 4321 (10 lines)

BRUCE MARTYN LTD.
INDUSTRIAL FLOORING
Stirling House, Barnet By-pass, Boreham Wood, Herts. Telephone: Elstree 3781/2

CONCRETE FLOOR SEAL
(OIL & DUST PROOF)
FLUID GLASS PRODUCTS LTD
YEOMAN ST., LONDON, S.E 8
Telephone: BER. 3237

T & G WOOD BLOCKS, STRIP, WOOD MOSAIC, ALUFLOOR, TILES & FIGURED OAK PARQUETRY
THE LONDON FLOORING COMPANY FOR **GUARANTEED** FLOORS
15 & 17 CLOUDESLEY ROAD · LONDON N.1 Telephone: Terminus 6791
MACHINE SURFACING & POLISHING OF EXISTING FLOORS · REPAIRS etc.

ORLIT PIONEERS OF PRECAST REINFORCED CONCRETE FRAMES AND FLOORS. EGHAM 3601/4

DOOR SLIDING GEAR
ALDAM, E. Hill, & Co (All systems), Britannic Works, Red Lion Road, Tolworth, Surbiton, Surrey. ELMbridge 0090 (6 lines).
Ellard Sliding Door Gears, Ltd.

DOOR SPRING REPAIRS
THE MAINTENANCE CO., LTD., 146a, LEA BRIDGE ROAD, CLAPTON, LONDON, E.5. Telephone: AMHERST 0388.

DOORS
JABLO Plastics Industries, Ltd., Mill Lane, Waddon, Croydon, Surrey.

DOORS (STEEL)
Clark, Hunt & Co., Ltd. Haywards, Ltd.
Edward Farr, Ltd.

DOORS (WOODEN), Etc.
F. HILLS & SONS, LTD., NORTON ROAD, STOCKTON-ON-TEES.
Austins of East Ham, Ltd. Linden Doors, Ltd.
Bryce, White & Co., Ltd. Sadd, John
Cattle, R., Ltd. Shapland & Petter, Ltd.
Leaderflush, Ltd. Travis & Arnold, Ltd.

DRAIN CLEARING TOOLS
Grey, Charles C.

DRAINAGE ENGINEERS
Burn Bros., Ltd.

DUCTS WORKS
Braby, Fredk., & Co., Ltd. Edward Farr, Ltd.
C. & M. Engineering Co., Ltd. Greenwood's and Airvac Ventilating Co., Ltd.
Clark, Hunt & Co., Ltd Harvey, G. A., & Co., (London), Ltd.

DUST SHEETS
BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367, 2 lines.
Boulton Scaffolding, Ltd.

ELECTRIC DRILLS
Kango Electric Hammers, Ltd.

ELECTRIC HAMMERS
HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines.)
Kango Electric Hammers, Ltd.

ELECTRICAL ACCESSORIES
British Insulated Callender's Cables, Ltd. M. K. Electric, Ltd.
General Electric Co., Ltd. Philips Electrical, Ltd.

ESCALATORS
Hall, J. & E., Ltd.

EXCAVATORS
DOE, ERNEST, & SONS, LTD., Industrial Division, Ulting, Essex. Tel. No.: Hatfield Peverel 311 (12 lines). Night Tel.: Hatfield Peverel 319
HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines.)

EXPANSION JOINTING FOR CONCRETE ROADS
EXPANDITE, LTD., Chase Road, London, N.W.10.
PERMANITE, LTD., 455, OLD FORD ROAD, LONDON, E.3. ADVANCE 4477 (20 lines).
SIKA, LTD., NO. 7, BUCKINGHAM GATE, S.W.1. VICTORIA 3693/4 and 0666.
SMITH, H. V., & Co., Ltd., 24 Ashley Place, Westminster, S.W.1.
TRETOL SERVICISED, LTD., 2, Caxton Street, London, S.W.1. ABBey 1024.
Felts and Damp Courses, Ltd. McNeill, P., & Co., Ltd.

FENCING (WOOD)
Croggon & Co. Penfold Fencing, Ltd.
Darlington Fencing, Ltd. Skinner, W. A., & Co., Ltd.
Holt, Bernard

FELT ROOFINGS
OVERALL-ROOF COVERINGS
B.R. DEPOT, HIGH ROAD, LEYTONSTONE, E.11.
LEY. 8195 (24 HOUR SERVICE).
BUC. 1698 (PRIVATE).
PERMANITE, LTD., 455, OLD FORD ROAD, LONDON, E.3. ADVANCE 4477 (20 lines).
Blackwells & National Roofings, Ltd. General Asphalte Co., Ltd.

FIBROUS PLASTERWORK
Allied Guilds

FIRE-CHECK DOORWAYS
Linden Doors, Ltd.

FLOORING

Wood Block, Parquet, Strip, Wood Mosaic, Rubber, Cork and Marley Tiles, Repairs and Resurfacing, Estimates Free

DE GAY FLOORING LTD.
67, MIDDLETON AV., GREENFORD, MIDDX.
Phone: WAX. 5263, CAN 2470.

FLOORING
STRIP & BLOCK
PARQUET OVERLAY
THERMOPLASTIC
VINYL & CORK
Ex Stock
•
SUPPLY ONLY
or LAID and POLISHED
OLD FLOORS RENOVATED
Technical Advice and Surveys
Labour Saving Maintenance
WILLIAM THORNTON & Sons Ltd.
38 Wellington Rd., Liverpool 8
Tel.: Lark Lane 1921/4 Grams: Thornpool, Liverpool

ELTEX
ARMOURED PAVING TILES
FOR FACTORY FLOORS
E. J. ELGOOD LTD.
London, S.E.8. Tel.: BER 1144 (7 lines)

ELCO
CORK TILE FLOORING
E. J. ELGOOD LTD.
LONDON, S.E.8
BER. 1144 (7 lines)

FLOORING SPECIALISTS
PARQUET, WOOD BLOCK, STRIP, RUBBER, CORK, COMPOSITION, RESURFACING.
30 years' experience
G. C. CONSTRUCTIONAL FLOORING CO. LTD.
CAMBRIDGE WORKS, STATION YARD, THE QUADRANT, RICHMOND, SURREY RICHMOND 8481/2/3

HIGH CLASS JOINERY
• FLUSH DOORS •
SHAPLAND
AND PETTER LTD
RALEIGH WORKS
BARNSTAPLE

FIRE ESCAPE STAIRCASES
Braby, Fredk., & Co., Ltd. Gardner, J., & Co., Ltd.
Clark, Hunt & Co., Ltd. Haskins
Edward Farr, Ltd.

FIREPLACE SURROUNDS (TILED)
Eastwoods Sales, Ltd.

FIRES
Allied Ironfounders, Ltd. Ideal Boilers & Radiators, Ltd.

FLAGSTAFF MAKERS & ERECTORS
CHARLES BUTTERFIELD, LTD., SOBRAON WORKS, STRATFORD, E.15.
GRAY, J. W., & Son, Ltd., Tudor House, 1, Princeton St., Bedford Row, W.C.2. Tel.: Chs 8701.2.

FLASHING & CAPPINGS (ALUM & STEEL)
RICHARD CHANTRY & CO., LTD., Faraday Way, St. Mary Cray, Orpington, Kent. Orpington 20307/8.

FLOOR-CENTRES
Acrow (Engineers), Ltd Rapid Metal Developments, Ltd.

FLOOR SANDERS
HORSLEY, SMITH & HEWETSON, Hayes, Middlesex. Tel.: 2931. Marfleet, Hull. Tel.: 13880.

FLOOR SEALERS
SEALOCRETE PRODUCTS, LTD., Atlantic Works, Hythe Road, N.W.10. Tel.: Ladbroke 0015/6/7.
Fluid Glass Products, Ltd Steel-Crete, Ltd.
Watco (Sales), Ltd.

FLOORING ADHESIVES
Dussek Bitumen & Taroleum, Ltd. Tretol Associated Products, Ltd.

FLOORING (COMPOSITION)
G. C. Constructional Flooring Co., Ltd. Modern Tile & Floor Co., Ltd.
Martyn, Bruce, Ltd. Thornton, William & Sons, Ltd.
Paramount Asphalte, Ltd.

FLOORING CONTRACTORS
THE LONDON CRYSTAL WINDOW CLEANING CO., LTD., 60, LANCASTER MEWS, LANCASTER GATE, LONDON, W.2.
A. VIGERS SONS & CO., LTD., 58-59, Poland Street, Oxford Street, London, W.1. Gerrard 5724/6.
General Asphalte Co., Ltd. Martyn, Bruce, Ltd.
G. C. Constructional Flooring Co., Ltd. Neuchatel Asphalte Co., Ltd.
Kerr, Robert, & Sons (Flooring), Limited. Philip Flooring Co., Ltd., The
The London Flooring Co. Vigers Bros., Ltd.

FLOORING CONTRACTORS (ASPHALT)
PERMANITE, LTD., 455, OLD FORD ROAD, LONDON, E.3. ADVANCE 4477 (20 lines).

FLOORING (CORK)
Armstrong Cork Co., Ltd. Elgood, E. J., Ltd.
S. Bennett & Son (Wood Flooring), Ltd.

FLOORING (FIREPROOF)
FAWCETT CONSTRUCTION CO., LTD., 117, Victoria Street, London, S.W.1. Victoria 5845.
Girlings' Ferro-Concrete Co., Ltd. Kleine Co., Ltd.
Helical Bar & Engineering Co., Ltd. Siegwart Floor Co., Ltd.
Smith's Fireproof Floors, Ltd.

FLOORING (HOLLOW TILE)
FAWCETT CONSTRUCTION CO., LTD., 117, Victoria Street, London, S.W.1. Victoria 5845.
Helical Bar & Engineering Co., Ltd. Kleine Co., Ltd.

FLOORING (INDUSTRIAL)
Elgood, E. J., Ltd. Permanite, Ltd.
General Asphalte Co., Ltd. Sealocrete Products, Ltd.
Martyn, Bruce, Ltd. Tile Floors (Industrial) Ltd.

FLOORING (JOINTLESS)
Ebner, Jos. F., (1953), Ltd. Martyn, Bruce, Ltd.
General Asphalte Co., Ltd. Philip Flooring Co., Ltd., The
Magart, Ltd. Thornton, William, & Sons, Ltd.

FLOORING (PLASTIC & THERMOPLASTIC)
British Mouldex, Ltd.

FLOORING (RUBBER)
RUBBER FLOORING LTD., Bell Works, Harefield, Middlesex. Tel.: HARefield 2123-5 & 3293.
SORBO LIMITED, sole manufacturers of the "Sorbo" Wheelbarrow and Truck Tyres, Sorbo Works, Woking. Tel.: Woking 966 (5 lines). Tel. Add.: "Sorbo Woking."
Runnymede Rubber Co., Ltd.

FLOORING (STEEL)
Edward Farr, Ltd.

FLOORING SUPPLIES
COURTIN, LTD., 9a, Commerce Road, Wood Green, N.22. BOWes Park 0044/0045.
Thornton, William, & Sons, Ltd.

FLOORING (WOOD, WOOD BLOCK, PARQUET)
A. VIGERS SONS & CO., LTD., 58-59, Poland Street, Oxford Street, London, W.1. Gerrard 5724/6.
S. Bennett & Son Flooring, Ltd.
Calders, Ltd.
Ebner, Jos. F., (1953), Ltd.
De Gay Flooring, Ltd.
Hough Brothers, Ltd.
Leaderflush, Ltd.
The London Flooring Co.
London Crystal
Philip Flooring Co. Ltd., The
Stevens & Adams, Ltd.
Vigers Bros., Ltd.

FLOORS (PRESTRESSED)
Costain Concrete, Ltd.

FLUSH DOORS
Linden Doors, Ltd.

FORMWORK (SPECIAL)
Kwikform, Ltd.

FROST PROOFERS
British Bitumen Emulsions, Ltd.

GALVANISED GOODS
Braby, F., & Co., Ltd.
Clark, Hunt & Co., Ltd.
Croggon & Co., Ltd.
Edward Farr, Ltd.
Gardiner, J., & Co., Ltd.
Nicholls & Clarke, Ltd.

GARAGE DOORS
Linden Doors, Ltd.

GAS WATER-HEATERS (GEYSERS)
Ascot Water Heaters, Ltd.

GATES, RAILINGS (IRON), STAIRWAYS, Etc.
HASKINS, Blackhorse Lane, Walthamstow, London, E.17.
Boulton & Paul, Ltd.
Clark, Hunt & Co., Ltd.
Croggon & Co., Ltd.
Edward Farr, Ltd.
Gardiner, J., & Co., Ltd.
Haywards, Ltd.
Nicholls & Clarke, Ltd.
Potter Rax, Ltd.

GATES (WOOD)
AUSTINS OF EAST HAM, LTD.
Wyckham Blackwell, Ltd.

GLASS FIBRE (LAMINATED ROOF LIGHTS)
ALLAN BLUNN, LIMITED, 29, CRAVEN STREET, LONDON, W.C.2. Tel.: WHItehall 8801-2-3.
B.I.P. Reinforced Products, Ltd.
(Rillite) Rubber Improvement, Ltd.

GLASS MFRS. & MERCHANTS
Clark, James, & Eaton, Ltd.
Farmiloe, Geo., & Sons, Ltd.
Luxfer, Ltd.
Nicholls & Clarke, Ltd.
Pilkington Bros., Ltd.
Pugh Bros., Ltd.

GLASS (STAINED, PAINTED)
Farmiloe, Geo. & Sons, Ltd.
Goddard & Gibbs
Luxfer, Ltd.
Morris Singer Co., Ltd.
Nicholls & Clarke, Ltd.
Pugh Bros., Ltd.

GLAZING
C. COLLIN, LTD., The Glass House, High Street, Croydon. Tel.: CRO 2134 (4 lines) and CRO 8321.
Clark, James, & Eaton, Ltd.
Farmiloe, Geo., & Sons, Ltd.
Furniss & Co., Ltd.
Haywards, Ltd.
Luxfer, Ltd.
Mellowes & Co., Ltd.
Newman & Watson, Ltd.
Nicholls & Clarke, Ltd.
Paragon Glazing Co., Ltd
J. Pearson & Sons (London), Ltd.
Pugh Bros., Ltd.

GRANITE (BROKEN & CHIPPINGS)
COX, H., & Sons, Ltd., 33, Southampton Way, Camberwell, London, S.E.5.

GRANITE (POLISHED)
Art Marbles Stone & Mosaic Co., Ltd.
G. Dunkley
Mander & Germain, Ltd.

GRANITE SETTS & KERB
F. J. DANGERFIELD & CO., Ltd., 261a, Finchley Road, London, N.W.3. HAMpstead 8044/8.

GRANOLITHIC PAVING
MALCOLM MACLEOD & CO., LTD., GLEN ROAD, WALTHAMSTOW, LONDON, E.17. TELEPHONE: COPPERMILL 1147/8.
GRANO-METALLIC Paving and Plastering Co., Ltd., 557, Lea Bridge Road, London, E.10.

GUTTERS (CAST IRON)
HILLS BROS. (City 3094).

GUTTERS (CONCRETE)
Finlock Gutters, Ltd.

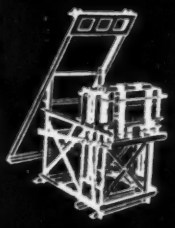
GUTTERS (HEAVY PRESSED STEEL)
E. STEPHENS & SON, LTD., 58-66, Bath Street, London, E.C.1. Clerkenwell 1731.

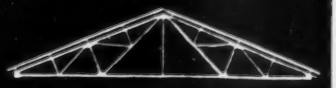
HEATING APPARATUS
Clark, Hunt & Co., Ltd.
Ideal Boilers & Radiators, Ltd.
Nicholls & Clarke, Ltd

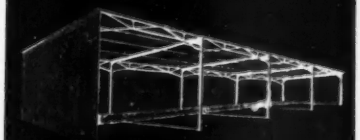
ELCOLIN
LINOLEUM FLOORING
E. J. ELGOOD LTD.
LONDON, S.E.8
BER. 1144 (7 lines)

SECOMASTIC LIMITED
BRACKNELL, BERKSHIRE
Telephone: Bracknell 910 (10 lines) Telex 25420

"ARCH-SPAN" PORTAL TYPE STEEL BUILDINGS GIVE MAXIMUM HEADROOM USING A LOW EAVES LINE. SPANS FROM 16 ft. TO 62 ft.


CONCRETE BLOCK MACHINES.
TEN MODELS FOR MAKING SLABS; SOLID AND HOLLOW BLOCKS, QUOINS, BRICK, ETC. FROM £12 TO £33.


ROOF TRUSSES FROM 10 ft. TO 80 ft SPAN, BASED ON B.S.S., FROM STOCK OR 7/21 DAYS.


"MONO-SLOPE" LIGHTWEIGHT STEEL BUILDINGS IN SPANS OF 12 ft., 15 ft., 18 ft., 20 ft., 25 ft. AND ANY LENGTHS.

JOHN REID & SONS
(STEEL CONSTRUCTIONS) LTD
43-47 Mill Road, Christchurch, Hants.
Telephone: Christchurch 3

LADDERS
STEPHENS & CARTER LTD
731-761, Harrow Road, N.W.10
TIMBER & ALUMINIUM LADDERS

HEATING & VENTILATING
Clark, Hunt & Co., Ltd
Newman & Watson, Ltd.
Watkin Heating Co., Ltd., The

HOISTS
AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.
A.C.E. Machinery, Ltd.
British Hoist & Crane Co., Ltd.
Morgan, A., & Co.
Ward, Thos. W., Ltd.

INCINERATORS
Braby, Fredk., & Co., Ltd.
Edward Farr, Ltd.
Harvey, G. A., & Co. (London), Ltd.

INSULATING MATERIALS
JABLO Plastics Industries, Ltd., Mill Lane, Waddon, Croydon, Surrey.
"Seco" Selection Construction Co., Ltd., Langham 7931.
British Plaster Board, Ltd., The
Cape Asbestos Co., Ltd., The
Celotex Ltd.
Dutton, Leonard, & Sons
Gyproc Products, Ltd.
McNeill, F., & Co., Ltd.
"Marith" Marley Tile Co., Ltd.
"Parovents" Paramount Asphalte, Ltd.
Permanite, Ltd.
Stramit Boards, Ltd.
Sundeala Boards Co., Ltd.
Thermacoust, Ltd

INSURANCE
Builders' Accident Insurance Ltd

IRON & STEEL PROTECTION
"Galvafroid" Secomastic, Ltd.

IRON & STEEL STOCKHOLDERS
HALL BROTHERS (WEST BROMWICH), LTD., Eagle Works, Greets Green, West Bromwich. Tel.: Tipton 1011 (10 lines). Telegraphic address: EAGLE WEST BROMWICH.
Clark, Hunt & Co., Ltd.
Dunlop & Ranken, Ltd.
Jones, T. C., & Co., Ltd.

KITCHEN UNITS
Austins of East Ham, Ltd.

JOINERY
Austins of East Ham, Ltd.
Cattle, R., Ltd.
Edmonds & Co., Ltd
Fosters (Woodworkers), Ltd.
James Joinery
Linden Doors, Ltd.
Sadd, John, & Sons Ltd.

JOINT SEALING COMPOUNDS
Secomastic, Ltd.

LADDERS (LOFT)
HENRY L. COCKLE, LTD., 9, TOTHILL STREET, WESTMINSTER, LONDON, S.W.1. Tel.: ABBEY 4471-2.

LADDER MAKERS (EXTENSION, Etc.)
HENRY L. COCKLE, LTD., 9, TOTHILL STREET, WESTMINSTER, LONDON, S.W.1. Tel.: ABBEY 4471-2.
PODMORE WORKS LIMITED, 769, 775, Garratt Lane, London, S.W.17. (Also Steps, Trestles.) Tel.: Wimbledon 7622.
AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.
Cayless Bros.
Farrar, E., Ltd.
Stephens & Carter, Ltd.
Scaffolding (Gt. Britain) Ltd.

LADDERS (STEEL)
Edward Farr, Ltd.

LAMINATED PLASTICS
Bakelite, Ltd.
Berite, Ltd.
Holoplast, Ltd.
Warite, Ltd.

LAMPS
Rannow Millman, Ltd.

LEADS, OIL COLOURS, SIZE
Farmiloe, Geo., & Sons, Ltd.
Nicholls & Clarke, Ltd.

LEAD (ORNAMENTAL), Etc.
STONER & SAUNDERS, LTD., 20, Woodfield Road, Paddington, W.9. Tel.: CUNningham 3321-2-3.

LEAD (SHEET & PIPE)
Farmiloe, Geo., & Sons, Ltd.

LEADED LIGHT MANUFACTURERS
Farmiloe, Geo., & Sons, Ltd.
Goddard & Gibbs
Nicholls & Clarke, Ltd

LIFTING GEAR
CHARLES BUTTERFIELD, LTD., SOBRAON WORKS, STRATFORD, E.15.
A. H. Allen (Engineers), Ltd.
Clifton, I., & Sons, Ltd.
Moore, W. & E., Ltd.

LIFTS
HAMMOND & CHAMPNESS, LTD., Gnome House, Walthamstow, London, E.17.
LONDON LIFT CO., 103, WORSHIP STREET, LONDON, E.C.2.
JENSEN LIFTS, LTD., (LIFT AND SPECIALIST ENGINEERS). REGent 2593.
Keith House, 133, Regent Street, London, W.1.
JAMES RITCHIE & SONS, LTD., 34, SURREY LANE, LONDON, S.W.11.
Bennie Lifts, Ltd.
Dennison, Kett & Co., Ltd.
Hall, J. & E., Ltd.
Penrose, Lifts, Ltd.
Pickerings, Ltd
Steven, A. & P., Ltd

LIGHTING DESIGN SERVICE
Philips Electrical, Ltd.

LIGHTNING CONDUCTORS

ELLIOTT, A. W. (Steeplejacks), & Co., Ltd.

GRAY, J. W., & SON, LTD., Tudor House, 1, Princeton St., Bedford Row, W.C.2. Tel.: Cha. 8701-2, and 13, Castle Street, Salisbury. Sal. 2750.

WM. & R. W. BACON, LTD., 55, REDBRIDGE LANE, ILFORD, ESSEX. CRESCENT 5347.

Furse, W. J., & Co., Ltd.

LIGHTWEIGHT STAGING

AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

LINOLEUM

Catesbys, Ltd. Elgood, E. J., Ltd.

LOCKS, LATCHES, Etc.

Adams, Robert (Victor), Ltd.

MACHINERY & PLANT

DOE, ERNEST, & SONS, LTD., Industrial Division, Ulting, Essex. Tel.: Hatfield Peverel 311 (12 lines). Night Tel.: Hatfield Peverel 319.

Acrow (Engineers), Ltd. Lewis & Lewis, Ltd.
Chamberlain Industries, Ltd. Liner Concrete Machinery Co., Ltd.
Danckaerts Woodworking Machinery, Ltd. Millars Machinery Co., Ltd.
Dandridge, A. F., Ltd. Scaffolding (Gt. Britain), Ltd.
Jones, T. C., & Co., Ltd.

MARBLE

JOHN STUBBS (MARBLE & QUARZITE), LTD., MERSEY WORKS, SMITHDOWN LANE, LIVERPOOL, 7. Tel.: ROYAL 4951.

Art Marbles Stone & Mosaic Co., Ltd. G. Dunkley Mander & Germain, Ltd.

MECHANICAL KEYING FOR RENDERINGS

SEALOCRETE PRODUCTS, LTD., Atlantic Works, Hythe Road, N.W.10. Tel.: Ladbroke 0015/6/7.

METROPOLITAN CONSTRUCTION CO., LTD., Bow Bells House, Bread Street (Cheapside), London, E.C.4. Tel.: City 1488 (2 lines) or City 5269 (2 lines). (Mettexture).

METAL WINDOWS REPAIRS

METAL WINDOW RENOVATORS, BARCLAYS BANK CHAMBERS, 1, KINGSLAND HIGH STREET, LONDON, E.8. Tel.: CLISSOLD 0564/5.

THE MAINTENANCE CO., LTD., 146a, LEA BRIDGE ROAD, CLAPTON, LONDON, E.5. Tel.: AMHERST 0388.

METAL WORK

E. STEPHENS & SON, LTD., 58-66, Bath Street, London, E.C.1. Clerkenwell 1731.

Potter Rax, Ltd.

MORTAR PLASTICISERS

CLODOL INDUSTRIES LTD.

SEALOCRETE PRODUCTS, LTD., Atlantic Works, Hythe Road, N.W.10. Tel.: Ladbroke 0015/6/7

SIKA, LTD., No. 7, BUCKINGHAM GATE, S.W.1. VICTORIA 3693/4 and 0666.

Lillington, Geo., & Co., Ltd. Sika, Ltd.
Tretol, Ltd.

MOSAIC & TERRAZZO PAVING

Cope & Co., Ltd. Marbolith Flooring Co., Ltd.

OFFICE EQUIPMENT

Clifton, I., & Sons, Ltd. Sankey-Sheldon, Ltd.
Libraco, Ltd.

OVERHEAD DOOR GEAR & GARAGE DOORS

AUSTINS OF EAST HAM, LTD.

PAINT & VARNISH MFRS.

DRYNAMELS LTD., SHAFTMOOR LANE, HALL GREEN, BIRMINGHAM, 28. Tel.: SPRINGFIELD 4481/2/3/4.

SEALOCRETE PRODUCTS, LTD., Atlantic Works, Hythe Road, N.W.10. Tel.: Ladbroke 0015/6/7.

Blundell, Spence & Co., Ltd. Morse, A. T., Sons & Co., Ltd.
Dixon's Paints, Ltd. Nicholls & Clarke, Ltd.
Duresco Products, Ltd. Pinchin Johnson & Co.
Farmiloe, Geo., & Sons, Ltd. Silexine Paints, Ltd.
Hubbuck, Thomas, & Son, Ltd. Sissons Bros. & Co., Ltd.
Lillington, Geo., & Co., Ltd. "Stic B" Paint Sales, Ltd.
Tretol, Ltd.

PAINTING CONTRACTORS

Alfred Bagnall & Sons, Ltd Cook, A. V., & Co., Ltd.
Bayliss, Ernie, Ltd. Decorative Painting Contractors, Ltd.

PARTITIONS

AUSTINS OF EAST HAM, LTD.

Stramit Boards, Ltd.

PARTITIONS (CELLULAR CORE)

JABLO Plastics Industries, Ltd., Mill Lane, Waddon, Croydon, Surrey.

PARTITIONS (METAL)

John Williams of Cardiff, Ltd.

PARTITIONS (STEEL)

Abix (Metal Industries), Ltd. Edward Farr, Ltd.

LUXFER

PAVEMENT LIGHTS
(framed in ferro-concrete or iron)
FLOOR LIGHTS STALLBOARD LIGHTS
ROOF LIGHTS SKYLIGHTS
DOME LIGHTS CEILING LIGHTS
LANTERN LIGHTS LEADED LIGHTS
FIRE-RESISTING GLAZING
ROOF GLAZING METAL CASEMENTS
ARCHITECTURAL METAL WORK

TEL.: ELG. 7292
WAXLOW RD. HARLESDEN N.W.10

OSLO AND GOTHENBERG POLE LADDERS WOOD AND ALUMINIUM EXTENSION LADDERS . STEPS . TRESTLES . etc.
E. FARRAR LTD.
Ladder & Truck Manufacturers
Well Lane, Halifax Tel. 2917
SEND FOR LISTS

ART MARBLES, STONE & MOSAIC CO. LTD.
SPECIALISTS IN
COLOURED MARBLE & GRANITE
WALL LINING • FLOORINGS
CLADDING OF BUILDINGS
SHOP FRONTS • CHIMNEY PIECES
BATHROOMS
Architects' Enquiries Welcomed
Estimates Free
GRAFTON ROAD, NEW MALDEN, SURREY
Tel. MALden 3228 and 4091

PEBBLES FOR PAVING
WALLEY (THURROCK) LTD.
West Thurrock, Grays, Essex
Telephone: Purfleet 5242

POLLOCK BROTHERS (London) LTD.
PLASTERERS & GRANOLITHIC WORKERS
11, Green Lane, Stoneycroft, Liverpool 13 — 473, New Cross Road, London, S.E.14
Phone: Stoneycroft 5351/2/3 Phone: Tideway 4438/9

ROYDE & TUCKER LTD. Clissold 2737
Patentees & Manufacturers of all types of SASH
ROYTUC REGD. *PULLEYS & CHAIN* 117/119
STOKE NEWINGTON RD., LONDON, N.16

MINTON HOLLINS LTD
MINTON TILES FOR WALLS & FIREPLACES
PatentTileWorks, Stoke-on-Trent

PAVEMENT LIGHTS

HAYWARDS, LTD., Union Street, Borough, London, S.E.1. Phone: Waterloo 6035 (5 lines).

JOHN HEALEY (London), Ltd., 32, Shaftesbury Avenue, London, W.1. Ger. 2610.

Luxfer, Ltd.

PERSPEX (CORRUGATED)

HARRISON & CO. (BUILDERS' MERCHANTS), LTD., B.R. GOODS DEPOT, LEYTONSTONE, LONDON, E.11. (LEY. 5851.)

PIPES (CONCRETE)

Eastwood Sales, Ltd.

PLASTERS

HARRISON & CO. (BUILDERS' MERCHANTS), LTD., LEYTONSTONE, LONDON, E.11 (LEY. 5851.) Carlite, Paristone, Thistle, etc., Plasterboards, etc.

Gyproc Products, Ltd. Gypsum Mines, Ltd.

PLASTERERS

Pollock Bros. (London), Ltd. Campbell Horne & Co., Ltd.

PLATFORM STAGINGS

BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367, 2 lines.

Boulton Scaffolding, Ltd.

PLUMBING CONTRACTORS

J. A. WILLIS & CO., 47, ELDON ROAD, N.22. BOW 4413.

Newman & Watson, Ltd.

PLUMBERS' BRASSWORK

Farmiloe, Geo., & Sons, Ltd.

PLYWOOD

W. M. LOOMAN & CO., LTD., 26-28, TABERNACLE STREET, FINSBURY SQUARE, E.C.2. Telephone: MONarch 0803.4.

William T. Eden (London), Ltd. Travis & Arnold, Ltd.

POLES

AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

PORTABLE AIR COMPRESSORS & ROAD BREAKERS

BROOM & Wade, Ltd., Engineers, High Wycombe, Bucks.

HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines).

Cox, H., & Sons (Plant Hire), Ltd.

PORTABLE BUILDINGS

AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

Clifton, I., & Sons, Ltd. Podmore Works, Ltd.
Marley Tile Co., Ltd.

PORTABLE POWER TOOLS

ARTHUR DRYSDALE & CO., LTD., 58, Commerce Road, Wood Green, London, N.22. Tel.: Bowes Park 7221. New, Used, Bought, Sold.

Cole, E. R., Ltd.

PRECAST CONCRETE MFRS.

MALCOLM MACLEOD & CO., LTD., GLEN ROAD, WALTHAMSTOW, LONDON, E.17. TELEPHONE: COPPERMILL 1147/8.

CAMBRIDGE ARTIFICIAL STONE CO., LTD., 121B, MILL ROAD, CAMBRIDGE.

Atlas Stone Co., Ltd. Finlock Gutters, Ltd.
Concrete, Ltd. Helical Bar & Engineering Co., Ltd.
Costain Concrete Co., Ltd. Kleine Co., Ltd.

PRECAST FLOORING & ROOFING

Helical Bar & Engineering Co., Ltd. John Cooke & Son (Huddersfield), Ltd.

PREFABRICATED CONSTRUCTIONS

"Seco" Selection Construction Co., Ltd. Langham 7931.

PROPS, STRUTS (STEEL)

BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367, 2 lines.

AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

Acrow (Engineers), Ltd. Scaffolding (Gt. Britain), Ltd.
Boulton Scaffolding, Ltd. Steel Scaffolding Co., Ltd.
Mills Scaffold Co., Ltd. Randow Millman, Ltd.

PROTECTIVE CLOTHING

AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

Clifton, I., & Sons, Ltd. Randow Millman, Ltd.

PUMPS, PUMPING ENGINEERS
HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines).
Greenwich Pump & Plant Co., Ltd.
Lewis & Lewis, Ltd.
Millars Machinery Co., Ltd.
Vales Plant Register Ltd.

PUTTY MANUFACTURERS
Farmiloe, Geo., & Sons, Ltd.
Hubbuck, Thomas, & Son, Ltd.

QUARZITE
JOHN STUBBS (MARBLE & QUARZITE), LTD., MERSEY WORKS, SMITHDOWN LANE, LIVERPOOL, 7. Tel.: ROYAL 4951.

RACKING (STEEL)
Abix (Metal Industries), Ltd.
Edward Farr, Ltd.

RAINWATER GOODS
Braby, F., & Co., Ltd.
Farmiloe, Geo., & Sons, Ltd.
Edward Farr, Ltd.
Harvey, G. A., & Co (London), Ltd.
Nicholls & Clarke, Ltd.

RAWLPLUGS
Rawlplug Co., Ltd.

RECONSTRUCTED STONE
Ferro-Concrete (Shepperton), Ltd.
Girlings' Ferro Concrete Co., Ltd.

REINFORCED CONCRETE ENGINEERS & CONTRACTORS
BRICKTOR Reinforcements.—Johnson's Reinforced Concrete Engineering Co., Ltd., Artillery House, Artillery Row, London, S.W.1.
HILLS Structures & Foundations, Ltd., Heather Park Drive, Wembley, Middlesex.
ORLIT, LIMITED, VICARAGE ROAD, EGHAM, SURREY. EGHAM 3601/4.
INDENTED BAR & CONCRETE ENGINEERING CO., LTD., 171, VICTORIA STREET, WESTMINSTER, S.W.1. TEL.: VICTORIA 1642 (2 lines).
FAWCETT CONSTRUCTION CO., LTD., 117, Victoria Street, London, S.W.1. Victoria 5845.
British Reinforced Concrete Engineering Co., Ltd.
Expanded Metal Co., Ltd.
Girlings' Ferro-Concrete Co., Ltd.
Helical Bar & Engineering Co., Ltd.
Jones, T. C., & Co., Ltd.
Kleine Co., Ltd.
Lind, Peter & Co., Ltd.
Simplex Concrete Piles Ltd.

R.C. PRECAST FLOORING & ROOFING
ORLIT, LIMITED, VICARAGE ROAD, EGHAM, SURREY. EGHAM 3601/4.
Celcon, Ltd.
Concrete, Ltd.
Costain Concrete Co., Ltd.
Girlings' Ferro-Concrete Co., Ltd.
Helical Bar & Concrete Engineering Co., Ltd.

REINFORCEMENT STEEL
Expanded Metal Co., Ltd.
Helical Bar & Engineering Co., Ltd.
Johnson's R.C. Engineering Co., Ltd.
Jones, T. C., & Co., Ltd.
Truscon, Ltd.
R. C. (Steel), Ltd.

RIVETS (ROOFING, CEILING)
Tucker, Geo., Eyelet Co., Ltd.

ROAD-MAKING EQUIPMENT
BROOM & Wade, Ltd., Engineers, High Wycombe, Bucks.
HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines).
Vales Plant Register, Ltd.

ROLLING SHUTTER MFRS.
SHUTTER CONTRACTORS, LTD., LINCOLN WORKS, GREAT CAMBRIDGE ROAD, ENFIELD. Tel. No.: ENFIELD 8383/4/5.
J. TAYLOR (SYSTON), LTD., Janus Works Albert Street, Syston, Leicester. Tel. Nos. Syston 2133 and Manchester, Ringway 3996.

ROOF INSULATION
JABLO Plastics Industries, Ltd., Mill Lane, Waddon, Croydon, Surrey.
"Seco" Selection Construction Co., Ltd. Langham 7931.
British Hermeseal, Ltd
Stramit Boards, Ltd.

ROOF LIGHTS
ALLAN BLUNN, LIMITED, 29, CRAVEN STREET, LONDON, W.C.2. Telephone: WHItehall 8801-2-3.
Farmiloe, Geo., & Sons, Ltd.
Haywards, Ltd.
Mellowes & Co., Ltd.
Paragon Glazing Co. Ltd.
(Rilite) Rubber Improvement, Ltd.

ROOF PANELS
"Seco" Selection Construction Co., Ltd., Langham 7931.

ROOFING CONTRACTORS
PERMANITE, LTD., 455, OLD FORD ROAD, LONDON, E.3. ADVANCE 4477 (20 lines).
Asphalte (London), Ltd.
Berry Wiggins & Co., Ltd.
Eastwoods Specialists, Ltd.
Excel Asphalte Co., Ltd.
General Asphalte Co., Ltd.
McNeill, F., & Co., Ltd.
Neuchatel Asphalte Co., Ltd.
Parkinson, E. (London), Ltd.
Roberts, Adlard & Co., Ltd.
Salter, Edwards & Co., Ltd.
Southern Asphalt, Ltd.

CRADLE-SCAFF LTD
6, 7 & 8, PERCY PLACE
SHEPHERD'S BUSH, W.12
Phone: SHEphard's Bush 2377 (4 lines)

E. PARKINSON (LONDON) LTD.
SLATE MERCHANTS
SLATING, TILING & ASBESTOS ROOFING CONTRACTORS
Phone: STA. HILL 3211-2
189 HIGH ROAD, S. TOTTENHAM, N.15

ASBESTUMEN, MULSEAL, PLASTIJOINT
EXPANDITE LIMITED
Chase Road, London, N.W.10. Tel: ELGar 4321 (10 lines)

PALMERS TRAVELLING CRADLE & SCAFFOLD Co. Ltd.
London Address: 3 WOODSIDE GREEN, S.E.25
Tel: Addiscombe 7721-4
Northern Address: 211, BOROUGH ROAD, MIDDLESBROUGH. Tel: Middlesbrough 3051.

NICOLL, DAWSON & HUMPHRIES LTD
Scaffolding Contractors
1, SOUTHERN GROVE
MILE END E.3
Phone: ADVance 1927

STEPHENS & CARTER LTD
SCAFFOLDING CONTRACTORS
731-761, Harrow Road, N.W.10
Tel: LADbroke 1191 (7 lines)
HIRE · ERECTION · SALE

New Life in Old Stones
A specialist service in stonework
NEW STONE & RESTORATION LTD.,
33, Sloane Street, London, S.W.1
BELgravia 6271/2

FURSE
STEEPLEJACKS, CHIMNEY BUILDERS AND REPAIRERS, CHURCH RESTORERS, LIGHTNING PROTECTION
W. J. FURSE & CO. LTD., 10 Traffic St., NOTTINGHAM
LONDON, MANCHESTER & BRISTOL

EDWARD FARR LTD.,
Napier Works, London, E.6.
Tel. Gra. 3431/3
Bridge Works, Wickford 2380
Structural Steelwork
Plate Fabrications
Tanks of all Descriptions
Steel Chimneys
Shearing, Bending & Pressing
Smith Work
Chain Testing

SZEREIMEY
ESTABLISHED OVER 100 YEARS
Restoration, Preservation and Cleaning
273-277, Rotherhithe New Road, London, S.E.16
Phone: Bermondsey 3094

ROOFING COMPOUNDS
SIKA, LTD., No. 7, BUCKINGHAM GATE, S.W.1. VICTORIA 3693/4 and 0666.
"RITO" & "RITOLASTIC," ANDREW MAXWELL DIVISION *(The Liverpool Borax Co., Ltd.)* Maxwell House, St. Paul's Square, Liverpool, 3.
"Aquaseal," Berry Wiggins & Co., Ltd.
"Bituseal" Sealocrete Products, Ltd.
"Cuirass," British Bye-Products, Ltd.
Dussek Bitumen & Taroleum, Ltd.
Expandite, Ltd.
Farmiloe, Geo., & Sons, Ltd.
Permanite, Ltd.
Ruberoid Co., Ltd.
Tretol, Ltd.

ROOFING FELT
PERMANITE, LTD., 455, OLD FORD ROAD, LONDON, E.3. ADVANCE 4477 (20 lines).
Blackwells & National Roofings, Ltd.
Felts & Damp Courses, Ltd.
McNeill, F., & Co., Ltd.
Podmore Works, Ltd.
Ruberoid Co., Ltd.

ROOFING (VARIOUS BRANDS)
PERMANITE, LTD., 455, OLD FORD ROAD, LONDON, E.3. ADVANCE 4477 (20 lines).
Anderson, D., & Sons, Ltd.
"Corroplast" Holoplast, Ltd
"Lion" McNeill, F., & Co. Ltd
Ruberoid Co., Ltd.

SAFES & STRONG-ROOM DOORS
CHATWOOD-MILNER LTD., 58, HOLBORN VIADUCT, LONDON, E.C.1. TEL.: CENTRAL 0041-5.
WITHERS, Samuel, & Co., Ltd., Park Works, West Bromwich. Tel.: West Bromwich 0122.

SAND & GRAVEL MERCHANTS
COX, H., & Sons, Ltd., 33, Southampton Way, Camberwell, London, S.E.5.
Eastwoods Sales, Ltd.

SANDERS (ELECTRIC)
HINE LIMITED, BEDFORD ROAD, LONDON, S.W.4. BRIXTON 1127.

SANITARY FITTINGS & ENGINEERS
H. M. JAMES, E.12. ILF. 4166.
Ideal "Standard" Specialists.
TIMMINS & FOULKES, LTD., King Street, Dudley, Worcs.
Burn Bros. (London), Ltd.
Clark, Hunt & Co., Ltd.
Eastwoods Sales, Ltd.
Farmiloe, Geo., & Sons, Ltd.
Greenwood & Hughes, Ltd.
Haywards, Ltd.
Nicholls & Clarke, Ltd.

SASH CHAINS & SASH PULLEYS
RHODES CHAINS, LTD., Carlisle House, 8, Southampton Row, London, W.C.1. Telephone: CHAncery 9377 (3 lines).
Royde & Tucker, Ltd.

SCAFFOLDING
BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551. 3 lines. WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367, 2 lines.
Boulton Scaffolding, Ltd.
Kwikform Ltd.

SEALING COMPOUNDS
SIKA, LTD., No. 7, BUCKINGHAM GATE, S.W.1. VICTORIA 3693/4 and 0666.
EXPANDITE, LTD., Chase Road, London, N.W.10.
KELSEAL, LTD., Vogue House, Hanover Square, London, W.1. Hyde Park 1411.

SECTIONAL BUILDINGS
Clifton, I., & Sons, Ltd.
Lesser, J. E., & Sons, Ltd.

SHEETERS (ASBESTOS CEMENT)
HINE LIMITED, BEDFORD ROAD, LONDON, S.W.4. BRIXTON 1127.

SHEET METAL WORKERS
E. STEPHENS & SON, LTD., 58-66, Bath Street, London, E.C.1. Clerkenwell 1731.
Clark, Hunt & Co., Ltd.
Edward Farr, Ltd.
Gardiner, J., & Co., Ltd.
Harvey, G. A., & Co (London), Ltd

SHELTERS
Clifton, I., & Sons, Ltd.

SHELVING (STEEL)
Abix (Metal Industries), Ltd.
Edward Farr, Ltd.

SHINGLES (CEDAR WOODS)
Colt, W. H. (London), Ltd.
McLellan Rawson & Co., Ltd.

SHOP & OFFICE FITTERS
JAMES WHITE (SHOPFITTERS), LTD., TEAM VALLEY TRADING ESTATE, GATESHEAD 11, CO. DURHAM. Tel.: LOW FELL 76077.
Edmonds, A. & Co., Ltd.
Pollard, E., & Co., Ltd

SHORES, ADJUSTABLE
BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551. 3 lines. WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367, 2 lines.
Acrow (Engineers), Ltd.
Boulton Scaffolding, Ltd.
Steel Scaffolding Co., Ltd.
Scaffolding (Gt. Britain), Ltd.

HY-RIB
combined shuttering and reinforcement
long span metal lathing
HY-RIB DIVISION, TRUSCON LIMITED
35-41 Lower Marsh, London SE.1. Telephone: WATerloo 6922

STEELWORK
"WHEN YOU NEED IT"
C & S CONSTRUCTION CO. LTD.
STRUCTURAL ENGINEERS
STEEL STOCKHOLDERS
ISLEWORTH, MIDDX.
Phone: ISLeworth 4155 (7 lines)

TILING?
Write or 'phone
COPE & CO. LTD.
8, GRAY'S INN ROAD, HOLBORN, W.C.1
Telephone: HOL 7541

"BATCO" TILES
FOR ALL FLOORS AND
WINDOW SILLS
BEAUTIFULLY MADE
IN MULTI OR PLAIN COLOURS
WRITE OR 'PHONE FOR
COLOURED BROCHURE
BRITISH ART TILE CO. LTD.
121B MILL ROAD
CAMBRIDGE
Telephone: CAMBRIDGE 50075

CRADLE-SCAFF LTD
TRESTLES AND PULLEY BLOCKS
also available for HIRE.
6, 7 & 8, PERCY PLACE, LONDON, W.12
SHEPHERD'S BUSH 2377 (4 lines)

SCAFFOLDING
HIRE AND SALE
IMMEDIATE DELIVERIES
SECURITY SCAFFOLDS LTD.
SPRING HILL, BIRMINGHAM, 18.
TEL: NORTHERN 4413

SHUTTERS, REVOLVING & ROLLING

HOWARD BROS., LTD., ABBEY MANUFACTURING ESTATE, MOUNT PLEASANT, WEMBLEY, MIDDX. Telephone: WEMBLEY 5015.

HASKINS "Rolador," Blackhorse Lane, Walthamstow, London, E.17.

Dennison, Kett & Co., Ltd.
Haywards, Ltd.
Hirschhorn, E., & Co., Ltd
Mather & Platt, Ltd.
Shutter Contractors, Ltd.
Taylor, J. (Syston), Ltd.

SIEVES, RIDDLES & SCREENS

GREENING, N., & Sons, Ltd., Britannic Works, Hayes, Middlesex.

SLATE & TILE MERCHANTS

BROUGHTON MOOR Green Slate Quarries, Ltd., Coniston, Lancashire.

ETRIDGE, J. J., Junr., Bethnal Green Slateworks, London, E.2.

KIRKSTONE GREEN SLATE QUARRIES, LTD., SKELWORTH BRIDGE, AMBLESIDE, WESTMORLAND.

Parkinson, F. (London), Ltd.
C. A. Harding & Co., (Bricks), Ltd.

SLATE (CILLS, COPING SHELVES, Etc.)

BROUGHTON MOOR Green Slate Quarries, Ltd., Coniston, Lancashire.

INIGO JONES & CO., TUDOR SLATE WORKS, GROELSON, CAERNARVON. TEL.: LLANWYNDA 242.

KIRKSTONE GREEN SLATE QUARRIES, LTD., SKELWITH BRIDGE, AMBLESIDE, WESTMORLAND.

SLIDING DOOR GEAR

ALDAM, E. Hill, & Co., (All Systems) Britannic Works, Red Lion Road, Tolworth, Surbiton, Surrey. ELMbridge 0090 (6 lines).

ELLARD SLIDING DOOR GEARS, LTD., Works Road, Letchworth, Herts. Tel: 613/4.

HENDERSON, P. C., LTD., ROMFORD, ESSEX (Complete range). Tel.: Ingrebourne 4111 (8 lines).

KING, Geo. W., Ltd., (All Systems), Argyle Works, Stevenage, Herts. Stevenage 440 (10 lines).

SLOTTED ANGLE (STEEL)

Abix (Metal Industries), Ltd.

SPLITHEADS

BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367, 2 lines.

Boulton Scaffolding, Ltd.

STAGE EQUIPMENT

Fosters (Curtains), Ltd.

STEEL CHIMNEY SHAFTS

C. & M. Engineering Co., Ltd.
Edward Farr, Ltd.
Gray, J. W., & Son, Ltd.

STEEL LOCKERS

Edward Farr, Ltd.

STEEL MOULDS FOR CONCRETE PRODUCTS

Acrow (Engineers), Ltd.

STEEL OFFICE & FACTORY EQUIPMENT

Sankey-Sheldon, Ltd.

STEEL SCAFFOLDING See also Tubular Scaffolding

BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367, 2 lines.

Boulton Scaffolding, Ltd.
Cradle-Scaff, Ltd.
Nicholl, Dawson & Humphries, Ltd.
Palmers Travelling Cradle & Scaffold Co., Ltd.
Security Scaffolds, Ltd.
Stephens & Carter, Ltd.
Tellok Appliances, Ltd

STEEL SHUTTERING

Acrow (Engineers), Ltd.
Kwikform, Ltd.
Rapid Metal Developments, Ltd.

STEEL SHUTTERS

HOWARD BROS., LTD., ABBEY MANUFACTURING ESTATE, MOUNT PLEASANT, WEMBLEY, MIDDX. Telephone: WEMBLEY 5015.

HASKINS "Rolador," Blackhorse Lane, Walthamstow, London, E.17.

SHUTTER CONTRACTORS, LTD., LINCOLN WORKS, GREAT CAMBRIDGE ROAD, ENFIELD. Tel. No.: ENFIELD 8383/4/5.

J. TAYLOR (SYSTON), LTD., Janus Works, Albert Street, Syston, Leicester. Tel. Nos.: Syston 2133 and Manchester, Ringway 3996.

Potter Rax Ltd.

STEEL STOCKHOLDERS

John Williams of Cardiff.
C. & S. Construction Co., Ltd.

PALMERS TRAVELLING CRADLE & SCAFFOLD Co. Ltd.
London Address: 3 WOODSIDE GREEN, S.E.25
Tel: Addiscombe 7721-4
Northern Address: 211, BOROUGH ROAD, MIDDLESBROUGH: Tel.: Middlesbrough 3051.

Boyle's Patent "Air Pump" Ventilator
OVER TWO MILLION IN USE
ROBERT BOYLE & SON
VENTILATING ENGINEERS
OYSTER LANE, BYFLEET, SURREY
Tel. BYFleet 4376

GEORGE LILLINGTON & Co., Ltd., Willow Lane, Mitcham, Surrey. No. 2 METALLIC LIQUID
A colourless solution for waterproofing exterior walls

"AQUAREP"
for 100% Waterproof Concrete
"FLUTOL B"
for Damp-proofing Interiors
Send for details.
DAMP-PROOFING LTD.
DEPTFORD, LONDON, S.E.8
TIDeway 1486-7

TOMO
DOUBLE GLAZED
'Picture' WINDOWS
Tomo stock-size horizontal pivot-hung windows have excellent thermal efficiency values and sound reduction properties. Made of best quality softwood, ready-primed.
5'11½" wide x 4'0¼" high: £25.0.0.nett.
4'0¼" x 4'0¼" high: £22.10.0. nett.
(ex works) B.S.644 sizes.
AVAILABLE FROM STOCK!
Full details sent on request:
TOMO TRADING CO. LTD. Cowley Peachey, Uxbridge, Middx. Telephone: West Drayton 3751
British Made

Call at
THE BUILDER BOOKSHOP
for a comprehensive selection of titles
THE BUILDER LIMITED, The Builder House, Catherine Street, Aldwych, London, W.C.2
Telephone: TEMPLE Bar 6251 (Extension 5)

STEEPLEJACKS

GRAY, J. W., & SON, LTD., Tudor House, 1, Princeton St., Bedford Row, W.C.2. Tel.: Cha 8701-2, and 13, Castle Street, Salisbury. Sal. 2750.

Furse, W. J., & Co., Ltd.

STONE, GRANITE, Etc.

BROUGHTON MOOR Green Slate Quarries, Ltd., Coniston, Lancashire.

JOHN STUBBS (MARBLE & QUARZITE), LTD., MERSEY WORKS, SMITHDOWN LANE, LIVERPOOL 7. Tel.: Royal 4951.

STONE CLEANING & RESTORATION

PETER COX & PARTNERS, LTD., 33, NORTH ROW, LONDON, W.1. MAYFAIR 1306/5076.

NEONORE Stone Restoration and Cleaning Specialists. Cranmer House, 39, Brixton Road, S.W.9. Telephone: Reliance 3111 (5 lines).

The London Stone Cleaning & Restoration Co., Ltd.
New Stone & Restoration, Ltd
Reparations-Dreyfus, Ltd.
Szerelmey, Ltd.

STRUCTURAL STEELWORK

ELLIS-JONES & PARTNERS, LTD.

SANDS, GEO., & SONS, LTD., COLWICK, NOTTINGHAM.

NORTHARC ORGANISATION, LTD., 260, Langham Road, West Green, London, N.15. 'Phone: BOWes Park 3757 & 7548.

A. H. Allen (Engineers), Ltd.
Austin, James & Sons (Dewsbury), Ltd.
Booth, John & Sons (Bolton), Ltd.
Boulton & Paul, Ltd.
Braby, F., & Co., Ltd.
Braithwaite & Co. (Engrs.), Ltd.
Clark Hunt & Co., Ltd.
C. & S. Construction Co., Ltd.
Croggon & Co., Ltd.
Dunlop & Ranken
Edward Farr, Ltd.
Gardiner, J., & Co., Ltd.
Haywards, Ltd.
Jones, T. C., & Co., Ltd.
Keay, E. C. & J., Ltd.
Ludwell & Co., Ltd.

SURFACING COMPOSITION (CEMENTITIOUS)

Pyrok, Ltd.

SURVEYORS' INSTRUMENTS

Hilger & Watts, Ltd.

TANKING

PERMANITE, LTD., 455, OLD FORD ROAD, LONDON, E.3. ADVANCE 4477 (10 lines).

General Asphalte Co., Ltd.

TANK LAGGING UNITS

Stramit Boards, Ltd.

TANKS, CISTERNS, CYLINDERS, Etc.

Braby, F., & Co., Ltd.
Braithwaite & Co., (Engrs.), Ltd.
C. & M. Engineering Co., Ltd.
Croggon & Co., Ltd.
Edward Farr, Ltd.
Farmiloe, Geo., & Sons, Ltd.
Harvey, G. A., & Co. (London), Ltd.
Mather & Platt, Ltd.
Nicholls & Clarke, Ltd.

TAPS

Evans, F. H., & Co., Ltd.

TAPS (MIXING)

Walker, Crosweller & Co., Ltd.

TAR-PAVING CONTRACTORS

General Asphalte Co., Ltd.

TARPAULINS

BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367, 2 lines.

Boulton Scaffolding, Ltd.
Clifton, I., & Sons, Ltd.
Fitton, S. & J., (Tarpaulins), Ltd.
Podmore Works, Ltd.
Smith, John, & Co., (London), Ltd.

TERRAZZO

PRECAST TERRAZZO, BILDMERCH, LTD., PARTHENON WORKS, WOOLWICH INDUSTRIAL ESTATE. WOOLWICH 7782.

TILES (FLOOR AND WALL)

STANBURYS TILING COMPANY, 42, BRADFORD ROAD, DEWSBURY.

"Accotile" Armstrong Cork Co., Ltd
Allied Brick & Tile Works, Ltd.
British Art Tile Co., Ltd.
Carter & Sons (London), Ltd.
Carter (Brockley), Ltd.
Cope & Co., Ltd.
Marley Tile Co., Ltd.

TILES (ROOFING)

Eastwoods Sales, Ltd.
Essex Tile & Concrete Co., Ltd.
Marley Tile Co., Ltd.
Walley, T. E., Ltd.

TIMBER

AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

Anderson, C. F., & Son, Ltd.
Bloore, W., & Son, Ltd.
Fry, W. S., Ltd.
Gliksten, J., and Son, Ltd.
Horsley, Smith & Co., Ltd
Morris, M. A., Ltd.
Phoenix Timber Co., Ltd.
Reuben, M. & J., Ltd.
Sadd, John & Co., Ltd.
Travis & Arnold, Ltd.
Vigers Bros., Ltd.

TOWER CRANES DISTRIBUTORS

DOE, ERNEST, & SONS, LTD., Industrial Division, Ulting, Essex. Tel. No.: Hatfield Peverel 311 (12 lines). Night Tel.: Hatfield Peverel 319.

Delta, (Plant), Ltd.
Record Tower Cranes (G. R. V. Briere).

TUBULAR SCAFFOLDING

BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367, 2 lines.

AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

PETER COX CRADLING CO., Grosvenor 2023.

Acrow (Engineers), Ltd.
Boulton Scaffolding, Ltd.
Cradle-Scaff, Ltd.
Essex Steel Scaffolding Co., Ltd.
London & Midland Steel Scaffolding Co., Ltd.
Mills Scaffold Co., Ltd
Palmer's Travelling Cradle & Scaffold Co., Ltd.
Randow Millman, Ltd.
Scaffolding (Gt Britain), Ltd.
Security Scaffolds, Ltd.
Steel Scaffolding Co., Ltd.
Stephens & Carter, Ltd.
Tellok Appliances, Ltd.
Turner Scaffolding, Ltd

VALVES (THERMOSTATIC MIXING)

Walker, Crosweller & Co., Ltd.

VENEERED PANELS

W. M. LOOMAN & CO., LTD., 26-28, TABERNACLE STREET, FINSBURY SQUARE, E.C.2. Telephone: MONarch 0803-4.

VENEERS

Gliksten, J., & Son, Ltd.

VENTILATING, Etc.

Boyle, Robert, & Son
Clark, Hunt & Co., Ltd.
Colt Ventilation, Ltd.
Edward Farr, Ltd.
Greenwood's & Airvac Ventilating Co., Ltd.
Harvey, G. A., & Co., (Ldn.), Ltd.
Haywards, Ltd.
Keith Blackman, Ltd.
Newman & Watson, Ltd

VENTILATORS

Boyle, Robert, & Son

VERMICULITE

A. R. & W. CLEAVER, LTD., Wood Street, Northampton.

DUPRE VERMICULITE, LTD., Tamworth Road, Hertford, Herts. Tel.: Hertford 2541. Dial HE3 2541.

THE IRON & MARBLE CO., LTD., 33, Victoria Street, Bristol, 1. Tel.: Bristol 27471.

Dohm Ltd.
Pyrok, Ltd.

WALLBOARD IMPORTERS

William T. Eden (London), Ltd.

WALLBOARD STOCKISTS

Anderson, C. F., & Son, Ltd.
Fry, Walter S., Ltd.

WALLBOARD MAKERS

Berite, Ltd.
Bowaters Building Boards, Ltd.
Brandt's, Wm., (Wallply), Ltd.
British Plaster Board, Ltd., The
Cape Asbestos Co., Ltd., The
Celotex, Ltd.
Creffield & Co., Ltd.
Gliksten, J., & Son, Ltd.
"Gyproc" Products, Ltd.
"Royal" Spencer, Lock & Co., Ltd.
Sundeala Board Co., Ltd.
Tretex Acoustics, Ltd.
"Weyroc" The Airscrew Co., & Jicwood, Ltd.

WALL-LININGS

Stramit Boards, Ltd.

WATER HEATERS

Aidas Electric, Ltd.
Ascot Gas Water Heaters, Ltd.

WATERPROOFING EMULSIONS

British Bitumen Emulsions, Ltd.

WATERPROOFING MANUFACTURERS

SIKA, LTD., No. 7, BUCKINGHAM GATE, S.W.1. VICTORIA 3693/4 and 0666.

DAMP-PROOFING, LTD., "Aquarep" and Fluto ("B"), U.K. Works, Deptford, London, S.E.8. Tel.: Tideway 1486-7.

"RITO" & "RITOLASTIC," ANDREW MAXWELL DIVISION (*The Liverpool Borax Co., Ltd.*) Maxwell House, St. Paul's Square, Liverpool 3.

Berry Wiggins & Co., Ltd.
British Bye - Products, Ltd.
Byrd, A. A., & Co., Ltd.
Damp-Proofing, Ltd.
Dussek Bitumen & Tarolеum, Ltd.
Evode, Ltd.
Grangersol Ltd.,
Kerner - Greenwood & Co., Ltd.
Lillington, Geo., & Co., Ltd.
Quickset Water Sealers, Ltd.
Sal-Ferracite & Trading Co., Ltd.
Sealocrete Products, Ltd
"Stic B" Paint Sales Ltd.
Tretol, Ltd.
Watco (Sales), Ltd.

WELDED STEELWORK

C. & M. Engineering Co., Ltd.
Edward Farr, Ltd.

WINCHES

DOE, ERNEST, & SONS, LTD., Industrial Division, Ulting, Essex. Tel. No.: Hatfield Peverel 311 (12 lines). Night Tel.: Hatfield Peverel 319.

A.C.E. Machinery, Ltd.
British Hoist & Crane Co., Ltd.

WINDOWS

Tomo Trading Co. Ltd.

WINDOW FRAMES & SASHES (METAL)

Braby, F., & Co., Ltd.
Crittall Manufacturing Co., Ltd.
Farmiloe, Geo., & Sons, Ltd.
Smith Bros. (Tividale), Ltd.
Haywards, Ltd.
Luxfer, Ltd.
Mellowes & Co. Ltd.
Nicholls & Clarke, Ltd.
Wiggins-Sankey, Ltd.
John Williams of Cardiff, Ltd.

WINDOW FRAMES & SASHES (WOOD)

Austins of East Ham, Ltd.
Tomo Trading Co., Ltd.

WIRE BRUSHES

GREENING, N., & Sons, Ltd., Britannic Works, Hayes, Middlesex.

WIREWORKERS & WEAVERS

GREENING, N., & Sons, Ltd., Britannic Works, Hayes, Middlesex.

POTTER, F. W., & SOAR, LTD., PHIPP STREET, LONDON, E.C.2.

WOOD PRESERVATIVES

Rentokil Woodworm & Dry Rot Centre
"Sidor" Anderson, D., & Sons, Ltd.
Szerelmey, Ltd.
Watco (Sales), Ltd.

WOOD WINDOWS (DOUBLE GLAZED)

Tomo Trading Co., Ltd.

WOODWORKING MACHINERY

Danckaerts Woodworking Machinery, Ltd.

WOOD SHUTTERS

SHUTTER CONTRACTORS, LTD., LINCOLN WORKS, GREAT CAMBRIDGE ROAD, ENFIELD. Tel. No.: ENFIELD 8383/4/5.

BOOKS *from the Builder Book Shop*

Cost of Building Chart: 1/6 POST FREE

This chart shows the rise in building materials and wages since 1939.

The Woking Experiment: 6d. POST FREE

The results of practical research into domestic insulation.

Insulation in Confusion: 6d. POST FREE

From THE BUILDER a pamphlet on insulation regulations.

Use of Ready Mixed Concrete: 1/- POST FREE

The writer describes the general principles of this method.

Organisation of Building Firms: 1/- POST FREE

Dealing with the organisation for medium-sized Builders.

★

4 Catherine St., Aldwych, WC2.
TEMPLE BAR 6251

"What you get out of concrete
depends on
what you put into it!"

SEALOCRETE DOUBLE STRENGTH PREMIX

speeds setting time—

RAPID HARDENING is no detriment, and allows release of shuttering in ½ to ⅓ the usual time; adhesion and workability of mix are increased, greater crushing and tensile strengths are achieved.

FLOORS incorporating Sealocrete Double Strength Premix can be walked on 4 to 6 hours after being laid; they are rendered dustproof, highly resistant to surface wear under heavy usage, and attain the hardness and durability demanded by modern industrial applications.

PERMANENT WATERPROOFING of cement and concrete renderings, roughcast, etc., is ensured by the use of Sealocrete Double Strength Premix; greater resistance to attack by acids, alkalis, oils and organic matter is achieved; seals leaks under pressure.

BUILD ON the strength and impermeability you get with Sealocrete Double Strength Premix.

TO: Sealocrete Products Ltd.,
Atlantic Works, Hythe Road, London N.W.10

Name .....

Address .....

.....

I am interested in Sealocrete DOUBLE STRENGTH PREMIX, and I require (without obligation) full details and prices and/or visit by your technical adviser.

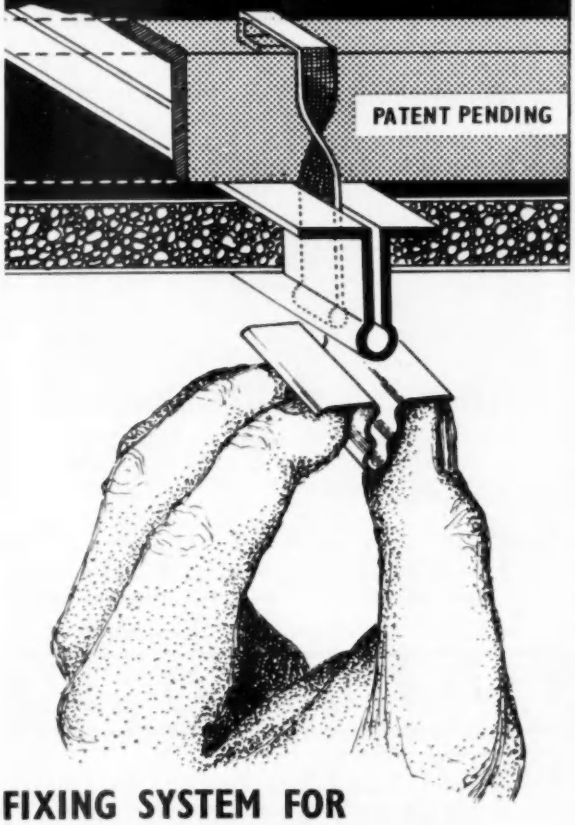
BL. 3/3/61

SEALOCRETE PRODUCTS
USED ALL OVER THE WORLD

SEALOCRETE PRODUCTS LTD.

Atlantic Works, Hythe Road, London, N.W.10.
Tel: Ladbroke 0015/P.B.E.
Grams: Sealocrete, Wesphone, London. Cables: Sealocrete, London.

JABLO KLIP-ON



FIXING SYSTEM FOR JABLITE INSULATION

★ **SIMPLICITY** —**THE JABLO (THE ORIGINAL) KLIP-ON FIXING SYSTEM** is the easiest of all systems to erect. No special skills or tools required.

★ **ADAPTABILITY** —**JABLO KLIP-ON FIXING SYSTEM** can be adapted to suit all types of new or existing buildings. Suitable for horizontal, vertical or inclined linings.

★ **ACCESSIBILITY** —**JABLO KLIP-ON FIXING SYSTEM** allows removal and replacement without damage of insulation for access to roof cover, structure, lighting or other services.

★ **ECONOMY** —**JABLO KLIP-ON FIXING SYSTEM** compares favourably in price with any other type—and saves in assembly time, too!

For Price Lists and Further Details of Jablo (the Original Klip-On System), write to Manufacturers:—

JABLO PLASTICS INDUSTRIES LIMITED
JABLO WORKS WADDON CROYDON

Telegrams: "JABLO, CROYDON" *Telephone:* CROYDON 2201-3, 9376, 6529, 6922

Restoration of a south
clerestory window
The Parish Church
High Wycombe

Peter Cox
& Partners Ltd

33 North Row London W1
Mayfair 1306, 5076

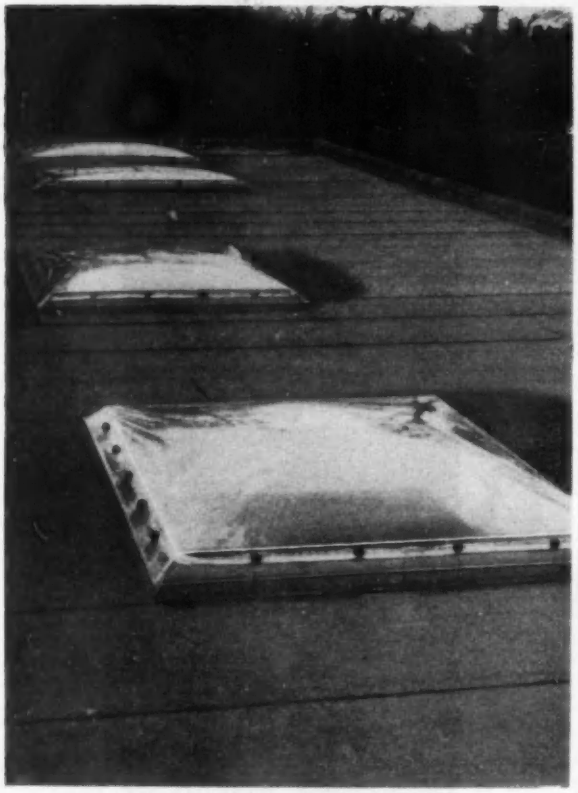
Stone restoration
contractors

A tip worth having!

Lingfield 1961

COXDOMES

the favourite



Some of the 94" x 70" Mark II Coxdomes installed over the Weighing-in Room at Lingfield Racecourse, Surrey, for the Racecourse Betting Control Board. Main Contractors, Messrs. Hoad and Taylor Ltd.

COXDOMES

FOR ADDED LIGHT

Leading the field (as usual) the Mark II Coxdome was an automatic choice for the new Weighing-in Room at Lingfield Racecourse. Virtually unbreakable, the Mark II Coxdome, which has a unique constant angle of slope on all sides for ease of installation, is available in rectangular or square shapes in either clear "Perspex" (which has a light transmission of 92%) or in diffused opal for privacy and anti-glare.

The new Coxdome Mark II brochure is now ready. Architects, building contractors and anyone else interested are invited to send for their copy.

Williaam J. COX (SALES) Ltd.

"PERSPEX" FABRICATORS, SHAPERS & STOCKISTS.

(Approved D.G.I. Aviation No. 10643)

LONDON ROAD, TRING, HERTS. Tel: TRING 3286/7/8

Austins

UPWARD OPENING DOOR

with Henderson GEAR

for less than £18-0-0

- EASILY AND SILENTLY OPERATED
- NO DRUMMING OR CLANGING NOISE
- WOOD IS WARMER, CANNOT RUST

Austins OF EAST HAM LTD

1861-1961 ONE HUNDRED YEARS OF WOODWORKING

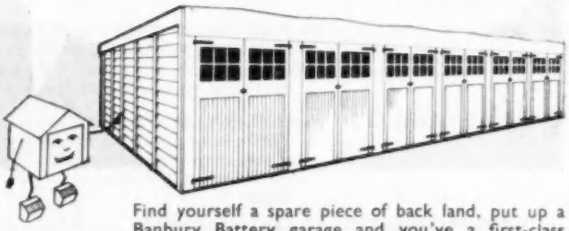
Abbots Road, East Ham, London, E.6. Tel.: Grangewood 3444/9

B.3

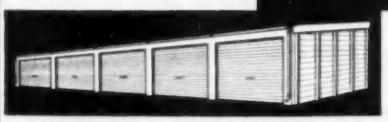
BANBURY

Mr. BANBURY Says:-

BANBURY BATTERIES *are a wonderful investment*



Find yourself a spare piece of back land, put up a Banbury Battery garage and you've a first-class lifetime investment. Only a small capital outlay and the rentals will cover the repayments. There's an enormous and growing demand for lock-up garages. The fireproof, maintenance-free Banbury Battery is the profitable way to meet this demand.



Write now for Banbury Battery Garage brochure

PORTABLE CONCRETE BUILDINGS Ltd.

Ironstone House, Aynho Road, Adderbury East, Banbury, Oxon.

TELEPHONE BANBURY 4242/7

YOU GET SO MUCH MORE FOR YOUR MONEY . . .

* NO 'MIXTURE' PETROL AND OIL IN SEPARATE TANKS
* NO AIR CONTROL OR 'STRANGLER'
* AUTOMATIC LUBRICATION
* POSITIVE CARBURATION ENSURES INSTANT STARTING - CONSTANT RUNNING
* FIRST RATE AFTER SALES SERVICE

Ask for demonstration

. . . with a JOHNSON MAXTAMP POWER RAMMER

JOHNSON QUALITY PAYS

C. H. JOHNSON (MACHINERY) LIMITED,
STOCKPORT, CHESHIRE
Telephone: Stockport 2642/5. Telex 66-297.
Telegrams: "Machinery" Stockport.

FOR DUMPERS · MUD PUMPS · CENTRIFUGAL PUMPS · POWER RAMMERS
POKER VIBRATORS · SCREED VIBRATORS · FIXED AND MOBILE CONVEYORS

London Sales & Service Depot: 38-44, Lower Richmond Rd., S.W.14. Tel. PROspect 7671. Scottish Sales & Service Depot: 119, Whitefield Rd., Govan, Glasgow, S.W.1. Tel. Govan 2701

"A LITTLE KNOWLEDGE IS A DANGEROUS THING BUT KNOWING WHERE, REWARDS WILL BRING"

This is how our hired plant can help you—

HOISTS—'Saga Junior' Petrol Scaffold Hoist ...	£3 0 0	per week
'Comet' Ace Mobile Hoist, Diesel, 10 cwt., height 20 ft.	£6 9 0	,, ,,
VIBRATORY ROLLERS—Green's 8 cwt., Petrol	£5 10 0	,, ,,
MOBILE TOWERS—Light, Sectional. Can be taken through any normal doorway. Rubber tyres for smooth running. Work any height from 2 ft. to 30 ft. above floor level—		
17 ft. to 22 ft.	£7 0 0	per month
21 ft. to 26 ft.	£8 10 0	,, ,,
25 ft. to 30 ft.	£9 0 0	,, ,,
DUST SHEETS—12 ft. x 9 ft.—First week ...	4 0	
Thereafter ...	2 0	per week
LIGHTWEIGHT STAGINGS—12 ft. to 14 ft.	3 0	,, ,,
15 ft. to 17 ft.	4 6	,, ,,
18 ft. to 20 ft.	6 0	,, ,,
22 ft. to 24 ft.	7 6	,, ,,
FLOOR SURFACING MACHINES— For Terrazzo floors, small	£4 0 0 (Stones extra)	,, ,,
TUBE BENDING MACHINES— Copper, up to 1½"	£2 10 0	per week
Steel, up to 2" (Hydraulic)	£5 10 0	,, ,,
VIBRATORS—Immersion type, 18 ft. flexible shaft, 2⅜" Head	£5 0 0	,, ,,
TRESTLES—Wooden—12 ft.	8 0	,, ,,
—14 ft.	12 0	,, ,,
—16 ft.	15 0	,, ,,
SCAFFOLD BOARDS— 9" x 1½"—per ft. per month of 4 weeks ...	2	

All Rates ex Depot
Subject to our Terms & Conditions

CAMPBELL-GRAY, LTD.

Office: **68/70, Penge Road, South Norwood, London, S.E.25.**
Tel. SYD 3131/5
Yard: **517, Lordship Lane, Dulwich, London, S.E.22.**
Tel. FOR 9795

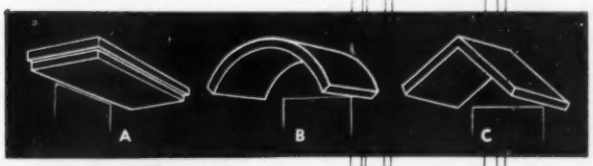
Specify ALUMINIUM CANOPIES

Ahead of modern design yet in keeping with the demands of price and time factors—these canopies are proving to be a success all over this country. Briefly the salient points are listed below.

Alicanopies

(a) ECONOMICAL TO BUY AND TO FIT.
(b) EASE AND SPEED OF FITTING.
(c) LONGEVITY.
(d) PRODUCED IN A VARIETY OF DESIGNS — ALL IN GOOD TASTE.
(e) FINISHED IN CREAM ENAMEL.
(f) ADD DIGNITY TO ANY NEW BUILDING, OR CAN BE USED TO MODERNIZE AN OLD BUILDING.

SEND FOR FOLDER ILLUSTRATING DESIGNS AND APPLICATION.



BAINBRIDGE BROS. (Engineers) LTD
FACIA WORKS, WOODHILL ROAD, BURY, LANCASHIRE
TELEPHONE: BURY 5034 5035

The perfect solution to plaster bonding problems

The solution is in the can. Plastaweld is the perfect plaster bonding fluid that goes on by brush, spray or roller. By using Plastaweld you eliminate the need for hacking and raking and save hours and hours of costly labour! A one gallon tin of Plastaweld will ensure a hundred square yards of perfect plastering—how's that for economy? Plastaweld is a proved material, manufactured under conditions of strict analytical control and is used widely on large contracts by Hospitals, Government Departments, Local Authorities and Building and Plastering contractors all over the world.

Plastaweld provides a satisfactory bond for plastering the following surfaces:—

SMOOTH FACED CONCRETE. SMOOTH POINTED BRICKWORK. SOUND PAINTED BRICKWORK. TEXTURED AND RELIEF PAINTED FINISHES. GLAZED BRICKS AND TILES. SOUND BACKING COATS FROM WHICH SETTING COATS HAVE SHELLED. BELLROCK PARTITIONING. ASBESTOLUX BOARDING. ANY OTHER FIRM, SOUND AND CLEAN SURFACE HOWEVER SMOOTH.

MANGERS
plastaweld

The permanent bond for gypsum plasters

Our Technical department will be very pleased to help you on any Plaster-bonding problem—write or 'phone

J. MANGER & SON (Dept B)
KINGSLAND, LONDON, E.8
Tel CLissold 8521

AN Amasal COMPANY

P C BRAND
TOP QUALITY—LOWEST PRICED

FOR BUILDING . HORTICULTURE AND INDUSTRIAL USE

POLYTHENE AT NEW REDUCED PRICES

Polythene Sheeting in convenient 20 Yard Rolls

150 GAUGE—CLEAR

32" Wide	5/8 Roll
48" Wide	8/4 Roll
72" Wide	12/6 Roll
84" Wide	14/8 Roll
96" Wide	16/8 Roll

200 GAUGE—CLEAR

36" Wide	8/4 Roll
48" Wide	11/3 Roll
72" Wide	16/8 Roll
100" Wide	23/- Roll

500 GAUGE—CLEAR

36" Wide	21/- Roll
48" Wide	27/9 Roll
72" Wide	41/9 Roll
96" Wide	55/6 Roll

SPECIAL LIGHTWEIGHT

48" Wide ... 5/6 Roll

BLACK SHEETING

48" Wide 150G ... 10/- Roll

TRADE ENQUIRIES INVITED

POLYTHENE BAGS
SPECIAL LIGHTWEIGHT

8 x 8	6/- per 100	43/9 1,000
8 x 10	7/6 " "	49/9 1,000
8 x 12	8/6 " "	56/- 1,000
8 x 14	9/6 " "	61/3 1,000
10 x 10	8/- " "	57/6 1,000
10 x 12	9/9 " "	62/3 1,000
10 x 15	11/- " "	74/- 1,000
10 x 18	12/- " "	84/6 1,000

12ft. WIDE SHEETING

150 Gauge 20 yd. lengths	25/-
200 Gauge 20 yd. lengths	33/4
500 Gauge 20 yd. lengths	83/6

CARRIAGE ON ORDERS
Up to £1: add 2/6 carriage
Up to £2: add 3/6 carriage
Over £2 add 5/- carriage

LARGE SHEETS UP TO SIZE 36 ft. x 60 ft. Prices on request.

TRANSGRIP. Exclusive device for securing Polythene sheeting under maximum tension. Ideal for Building Sites, Farms etc. . . . 3/6 each, 6 for 18/-, 24 for 62/6, 72 for 160/-, 144 for 300/-.

T. P. POLYPLASTIC CONVERTERS LTD.
(Dept. B.17) 29 Victoria Road, Surbiton Surrey. (ELMbridge 5271)

M.B. CLADDING
6 designs
12 woods
MITCHELL Brothers Ltd.
MARK STREET, LIVERPOOL 5
'Phone NORTH 2151/2

CLEARLY
BELCON
PRECAST CONCRETE STRUCTURES
ARE BETTER

BELL & WEBSTER LTD (A MEMBER OF THE ELECO GROUP) HODDESDON · HERTS · HODDESDON 4421

MISCELLANEOUS ADVERTISEMENTS

Prepaid, twenty-four words, 8/6; each additional six words, 2/-. Display, 30/- (per single column inch)

PODMORE WORKS
ladders · wood or aluminium · ladders
all types and sizes — ex stock
PHONE: WIMBLEDON 7622
Price List from 769-773 Garratt Lane, London, S.W.17

London's Leading Suppliers of S/H Scaffolding Typical Prices
Steel Tubes, 10/21 ft., 1/3½d. ft.
Steel Tubes, 6/9 ft., 1/2d. ft.
Steel Putlogs, 5' 0" 7/6d. each.
Double Couplers, 4/3d. each.
Putlog Couplers, 3/-d. Joint Pins, 4/6d. ea.
Acrow Props, Splitheads, H Frames, Boards, Roadforms, Trench Struts.
Immediate Delivery from Stock. Deferred terms available.
A. F. SIMPSON Ltd.
68/70 Penge Road, London, S.E.25
Telephone: SYDenham 3131/5

M MIDDLESEX SECTIONAL BUILDINGS
J. E. LESSER & SONS LIMITED
GREEN LANE · HOUNSLOW · MIDDLESEX
Tel: HOUnslow 7281-7

TOWER CRANE FOR SALE
Brand new unused Liebherr Tower Crane from latest range available at favourable price.
Phone:
Wilson Lovatt,
Wolverhampton 20661

LADDERS
STEPS
TRESTLES
TOWERS
TRUCKS
TROLLEYS
ETC.
MACaulay 2424 (3 lines) and 2092

Cayless
OF BATTERSEA
91-93 BATTERSEA PARK ROAD, LONDON S.W.8

WANTED

ARE YOU SELLING WOODWORKING MACHINERY? Then contact A. COOKSLEY & CO., 21/25 Tabernacle-street, London, E.C.2. MON 3355.

WANTED: ALLOY and STEEL TUBULAR SCAFFOLD, large quantities only. Sites cleared anywhere. Also all types of Non-Mechanical plant.—Contact: C. EVANS & SONS, Ltd., Burnside-street, Bow, E.3. Tel.: ADVance 5691/2/3.

TRENCH SHEETS, SCAFFOLDING and PROPS, etc., and similar items of non-mechanical Builders' Plant. Sites cleared by arrangement.—PLANT & BUILDING EQUIPMENT, Ltd., 1 Chatfield-road, London, S.W.11. Tel: BATtersea 9213.

WANTED—STEEL RODS, SECTIONS, CORRUGATED SHEETS, STEEL & ALLOY SCAFFOLDING, FITTINGS, SCAFFOLD BOARDS. Large and small quantities permanently required. Attractive prices, good payments, rapid decisions.—E. H. CHURCH & CO. (EDMONTON), Ltd., 68-70 Penge-road, S.E.25. Tel: SYDenham 3131.

FOR SALE

NISSEN TYPE HUTS for sale. Prompt despatch of 16 ft., 24 ft. and 30 ft. wide huts; also "Romney" Huts 35 ft. wide and "Blister" Hangars 86 ft. 6 in. and 91 ft. wide. These buildings are in various lengths and comprise steel framework with galvanised corrugated steel sheeting.—Full details from Dept. 129, J. THORN & SONS, Ltd., Brampton-road, Bexleyheath, Kent (Tel: Bexleyheath 0021.)

A NEW GIGANTIC HARDWOOD MOULDING CATALOGUE styled in Traditional, Continental and Contemporary designs, mass produced and precision made. Also EMBOSSED MOULDINGS, ORNAMENTS and DOWELS at today's lowest trade prices.—Write or 'phone DAREVE'S MOULDING MILLS, Ltd., Cassio Bridge Wharf, Watford, Herts. Tel: Watford 24241/2/3.

MANUFACTURERS of CONCRETE PRODUCTS. Fencing Kerbs, Flags, etc.—C. A. E. C. HOWARD, Ltd., St. John's Works, Bedford. Tel: Bedford 4204.

SECONDHAND SECTIONAL TIMBER BUILDINGS, 24 ft. x 12 ft., £102; 30 ft. x 15 ft., £138; 40 ft. x 18 ft., £192; 60 ft. x 20 ft., £302; floors extra, delivery included 100 miles. Also similar new buildings.—Lists, UNIVERSAL SUPPLIES, Crabtree Manorway, Belvedere, Kent. (Erith 32948.)

MOBILE LIVING UNITS AND OFFICES built to specification for Home and Overseas Contracts.—Write, TRAILER HOMES, Ltd., Shannon Corner, Kingston By-pass, New Malden, Surrey.

NEW AIR PUMPS. Diesel MOBILE COMPRESSORS and Armstrong Whitworth PNEUMATIC CONTRACTOR'S TOOLS, HOSES and ACCESSORIES from stock.—HUBERT C. LEACH, Ltd., High-street, Cheshunt, Herts. Tel.: Waltham Cross 25161.

COLORCRAFT PAVING, Walling, Path Edgings, Copings, etc. Immediate delivery. Price list on request.—COLORCRAFT PAVING CO., Ltd., 95 High-street, Polegate, Sussex.

PUMPS.—Sale or Hire, New or Reconditioned Hand, Electric and Petrol-driven outfits.—THE GREENWICH PUMP & PLANT CO., Ltd., Denham-street, Greenwich, S.E.10. Greenwich 6336.

CAST IRON R.W. GUTTERS are best for strength and durability—115 years so far at Kew Gardens. New stocks are at Hanwell, W.7, and for Factory Gutters, Valley, B. Wall, Box, etc., 8, 9, 10, 12, 14, 15, 16, 18, 21 and 24 in. wide, stocked at Foundries. Allow delivery 7 days.—HILLS BROS. (Est. 1932), 49 Queen Victoria-street, London, E.C.4. CITy 3094.

STEEL and ALLOY SCAFFOLD TUBE and Blade End PUTLOGS, for Sale, available in quantities. SCAFFOLD FITTINGS in makes S.G.B., Mills, Burton and Big Ben, etc., including DOUBLE COUPLERS, JOINT PINS, SWIVEL COUPLERS and PUTLOG CLIPS from 2s. 11d. each. All fully overhauled and in ready for work condition. — PLANT & BUILDING EQUIPMENT, Ltd., 1 Chatfield-road, London, S.W.11. BAT 9213.

SLEEPERS, immediate delivery, for Roadway, Silage, Machinery or relaying contact.—C. EVANS & SONS, Ltd., Burnside-street, Grove-road, Bow, London, E.3.

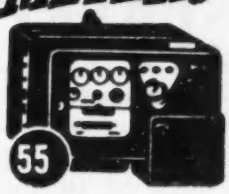
CREOSOTE, 40 gallons 90/-, delivered in free drum; REFINED TAR (needs heating), 93/4d.; BARN TAR (can be painted on cold), 96/8d.—COOPERS, Builders' Merchants, Ashford, Kent.

FOR SALE and HIRE. SKIPS (Circular Tipping and Rollover Concrete Pouring); also all types of non-mechanical equipment including ROAD FORMS, FLOOR CENTRES, TRENCH SHEETS, STRUTS, TRESTLES, SPLITHEADS, PROPS, etc.—PLANT & BUILDING EQUIPMENT, Ltd., 1 Chatfield-road, London, S.W.11. Tel: BATtersea 9213.

MARLEY MAKE THE BEST
CONCRETE GARAGES
Beautifully designed 100 models from £55 Cash or credit terms.
Erection Service.
COAL BUNKERS from £4.15.0
Free leaflets from:
MARLEY CONCRETE LTD.
Dept. A. 1/46, GUILDFORD, SURREY, and Cheltenham, Glos

EVERLASTO Sash Cord
Rotproof
Weatherproof
Non Stretch
Low Cost
everlasto
JAMES LEVER & SONS, LTD.
DELPH STREET BOLTON

FACTORY GUARANTEED
SLOTMETERS
HOTELS
CARAVANS
BILLIARDS
TELEVISION
etc. *from*
also
CHECK METERS
TIME SWITCHES
etc.



TRADEX METER CO LTD
(Dept. B), 67, MAPLE ROAD SURBITON
Tel: ELMbridge 2234/5/6

LARGE QUANTITIES BRAND NEW
SHORING PROPS

SIZE 1	@	39/9 each
SIZE 2	@	40/6 each
SIZE 3	@	43/6 each
SIZE 4	@	48/6 each

TRENCH STRUTS

SIZE 1	@	22/6 each
SIZE 2	@	27/0 each
SIZE 3	@	31/6 each

IMMEDIATELY AVAILABLE!
A. B. MOULD & CONSTRUCTION CO. LTD.
VULCAN WORKS, **Vulcan Way, New Addington, Surrey**
Tel: LODGE HILL 2345/9

KENROY LTD.
152 & 297 UPPER STREET N.1.
ELECTRICAL & RADIO WHOLESALERS

CABLES
CONDUIT
SWITCHGEAR
WATER HEATERS
WIRING
ACCESSORIES

FIRES, HEATERS
IRONS, SHAVERS
REFRIGERATORS
SPIN DRIERS
VAC. CLEANERS
WASHERS

RADIO and T.V.
RECORD PLAYERS
INT. COM. EQUIP.
STEREO EQUIP.
TAPE RECORDERS

CALL or PHONE
CANonbury 6671/2/3

All types of Asbestos Machined to Architects' and Builders' Specification

Stockists of:
Flat Asbestos, Fully Compressed Asbestos, Fluted Asbestos, Reeded Asbestos, Asbestos Wood, Asbestos Insulation Board, Partition Board, ⅛" Flexible.

For:
Balcony Panels, Flower Boxes, Curtain Walling, Soffits, Shelving, etc.

PROMPT SERVICE

DALTON, BALLARD
& COMPANY LIMITED
Fleet Place, Upper Park Rd., N.W.3
Telephone: PRIMROSE 5854

For prompt delivery of...
Villiers JAP
ENGINES SPARES SERVICE
...get in touch with
LEWIS & LEWIS LTD.
SCHOOL RD. NORTH ACTON, LONDON, N.W.10
ELGAR 6757 (4 LINES)

Secondhand
SURVEYING APPARATUS
Guaranteed Levels
from stock
Also Land Chains, Steel and Lines Tapes, Surveyors' Measuring Rods, Ranging Poles and Levelling Staves.
We purchase modern 3-screw THEODOLITES for cash.
BRUNNINGS (HOLBORN) LTD
135, HIGH HOLBORN, LONDON, W.C.1
Phones: HOLborn 4894 & 0312. Established 1922

POLYTHENE SHEETING
Fablon or British Visqueen
250G. 144" x 150' £5. 4. 2d. each
500G. 144" x 150' £8. 8. 3d. each
1000G. 120" x 75' £8.13. 0d. each
Carr. 1 or 2 Rolls, 7/6d. each. 3 up, C/Paid
H. C. HILL LTD.,
68/70 Penge Road, LONDON, S.E.25
Telephone: SYDenham 3131/5

'BULLDOG' SHOVELS
'DREADNOUGHT' FORKS
The finest one-piece solid forged ENGLISH TOOLS made
Can be purchased from
LONDON STOCKISTS:
JOHN MACNAMARA
& Company Limited
Bush Road, Deptford, London, S.E.8.
BERmondsey 3275 1435

FOR SALE. 2,500 good quality SLEEPERS. What offers.—Apply: LEONARD W. POWER, Ltd., 41 Station-road, Waltham Abbey, Essex. Telephone, Waltham Cross 22519 or 23548.

SECONDHAND SLATES. Large stocks available for immediate delivery. Typical prices 24 in. x 12 in. @ 170s. per 100; 22 in. x 11 in. @ 130/- 100; 20 in. x 10 in. @ 115/- 100; 18 in. x 10 in. @ 90/- 100; 18 in. x 9 in. @ 84/- 100.—A. F. SIMPSON Ltd., 68/70 Penge-road, London, S.E.25. Telephone: SYDenham 3131/5.

FOR SALE. 120 8 ft. x 2 ft. 9 in. CORRUGATED SHEETS, suitable for fencing purposes.—PLANT & BUILDING EQUIPMENT, Ltd., 1 Chatfield-road, London, S.W.11. Tel: BATtersea 9213.

DUST SHEETS. heavy absorbent Bolton Twill with good hems, as used in our own plant hire. Size 12 ft. x 9 ft. 1-3 at 32s. 6d. each; 4-11 at 30s. 6d. each; 12 and over at 29s. each. Carriage paid Great Britain.—H. C. HILL, Ltd., 68-70 Penge-road, South Norwood, S.E.25. SYD 3131-4.

RAILWAY SLEEPERS. Sound, Secondhand, Railway Sleepers, Cart rod quality. 1-50 at 11s. 9d. each. 51-100 at 11s. 3d. each. 101 and over 10s. 9d. each. Ex yard at 10s. 9d. each. Carriage paid London area.—A. F. SIMPSON, Ltd., 68-70 Penge-road, South Norwood, S.E.25. SYD 3131-4.

BUILDING/DECORATING FIRM. (Croydon). Closing. Offers PLANT FOR SALE. Includes boards, ladders, extensions, trestles, steps, barrows, concrete mixers, site huts, Morris truck and materials, etc. 3,750 ft. sq. yard with small buildings will be let. List available.—Box 4328, "The Builder."

SHOPFRONTS. contemporary designs. Hardwood sashes, door and frame. Plate glass, fascia framing from £75.—Box 4280, "The Builder."

SCAFFOLDING & PLANT
(new and reconditioned)
For first-class service and continual supply of:—
Scaffold Tube (Steel and Alloy)
Putlogs (Steel and Alloy)
Fittings Boards
Trestles Splitheads
Props Struts
"H" Frames Floor Centres
Road Forms etc.
contact: **C. EVANS & SONS LTD.,**
Burnside Wharf,
Burnside Street,
Bow, London, E.3.
Tel: ADVance 5691 (3 lines)

GRANITE SETTS
DELIVERED ANYWHERE
HARRIS & BAILEY LTD.
CROYDON
ADDiscombe 3181 Ref: Mr. T. A. Jones

YOU CAN
DRAIN YOUR SUMP WITH A
"Muckypump"
–a Petrol-Driven DIAPHRAGM PUMP FOR UNDER **£85**
GREENWICH PUMP & PLANT CO. LTD.
DENHAM STREET, S.E.10
Phone: GREENWICH 6336

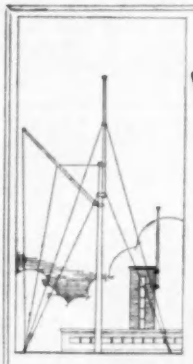
SYSTON
ROLLING SHUTTERS
IN STEEL, ALUMINIUM & WOOD
A. TAYLOR (SYSTON) LTD. · SYSTON · LEICESTER
Telephone: SYSTON 2133 and MANCHESTER RINgway 3996

DONKEY JACKETS
"Allweather" 30 ozs. Blue Melton, P.V.C. Back and Shoulders, 36"/46", 41/9d. each. "Popular", 30 ozs. Blue Melton Waterproof, Saddle Lining, 36"/46", 37/-d. each.
1 or 2, 2/-d. each Carriage. 3 and over, C/paid.
H. C. HILL LTD.
68/70 Penge Road, LONDON, S.E.25
Telephone: SYDenham 3131/5

PODMORE SITE HUTS

Prompt despatch
Keen prices
High quality
Phone:—
WIMbledon 7622
PODMORE WORKS Ltd.,
769-773 GARRATT LANE, LONDON, S.W.17

2/300 tons Steel
Sound S/H R.S.J. and Angles, etc.
New Stock Rusty M.S.R.
Immediate Delivery from Stock
A. F. SIMPSON LTD
68/70 Penge Road, London, S.E.25
Telephone: SYDenham 3131/5


FLAGSTAFFS
and flags
Designed, manufactured and erected
'PHONE HOP 3734
TARPAULINS-ON-HIRE
immediately available
BENJAMIN EDGINGTON
29 Queen Elizabeth St., S.E.1

NEW TARPAULINS
EXACT SIZES ONLY
JUTE, 16 oz. before green wax proofing, 12' x 9' each 82/6, 15' x 12' each 132/6, 18' x 12' each 152/6, 21' x 15' each 204/6.
FLAX, 16 oz. before green chemical proofing, 12' x 9' each 97/-, 15' x 12' each 149/6, 18' x 12' each 168/6, 21' x 15' each 237/6.
COTTON DUCK, 14 oz. before green chemical proofing, 12' x 9' each 104/3, 15' x 12' each 162/6, 18' x 12' each 186/6, 21' x 15' each 258/6.
BRAND NEW SHEETS, carriage paid England and Wales. Fitted long ropes, brass eyelets and strengthening patches.
ANY QUANTITY FROM LONDON STOCK
JOHN MACNAMARA & CO. LTD.
Bush Road, Deptford, London, S.E.8
BER 3275-1435

WINGET
SERVICES LIMITED
COATBRIDGE & EDINBURGH

WINGET WORKS ROSEHALL
COATBRIDGE

Telephone
1232/3

YOUR SERVICE IN SCOTLAND

FOR HIRE!
EXCAVATORS · DUMPERS · ROLLERS
Modern Machines — First Class Operators
Competitive Rates

WS2

NEW SITE HUTS

Size	Shiplapped	F/Edge
8' x 6'	£38. 2. 0	£34.13. 0
10' x 8'	£51.10. 0	£47. 5. 0
12' x 8'	£57.10. 0	£51. 9. 0

Including Floors
Carr. Paid 25 Miles

H. C. HILL LTD.
68/70 Penge Road, London, S.E.25
Telephone: SYDenham 3131/5

FOR HIRE

FOR HIRE
EXCAVATORS
TRACTORS
TRAXCAVATORS
LOADING SHOVELS
COMPRESSORS
LIGHT DUMPERS
CONCRETE MIXERS, ETC.

H. COX & SONS
(PLANT HIRE) LTD.
33 SOUTHAMPTON WAY
CAMBERWELL S.E.5
RODNEY 2215 (4 LINES)

HIRE
LADDERS
UP TO 80 FT. EXTENDED
TOWER LADDERS
UP TO 35 FT. WORKING HEIGHT
POLE LADDERS
UP TO 80 RUNGS
TRESTLES & STEPS
FROM
JOHN
MACNAMARA
& CO. LIMITED
BUSH ROAD, LONDON, S.E.8
BERMONDSEY 3275 & 1435

FOR HIRE

D.M.S. PLANT HIRE

LADDERS, Trestles, Tarpaulins, Lightweights, Scaffolding, Floor Sanders, Mixers, Dust-sheets, Spraying Machines, Steam Strippers, etc.—196 Camden-road, N.W.1. GUL 6977.

HIRE ELECTRIC WELDERS or with option to purchase. Low rates: e.g. 180 amp. £15 for 3 months, reducing.—Ring Gulliver 6006.—RENT WELD, Ltd., 94 Camden-road, London, N.W.1.

THREE KW. 110V. D.C. PETROL GENERATORS for hire. Ideal for site electric lighting and power tools.—PARK-STANTON & CO., 72 Leadenhall-street, E.C.3. AVE 1416.

FOR HIRE: TUBULAR SCAFFOLDING, Scaffold Boards, Extension Ladders, Trestles, Steel Props, Tarpaulins and Dust-sheets, etc., Pumps, KANGO Hammers and Breakers.—HAINES PLANT, 72 Londoun-road, London, N.W.8. PRImrose 3324.

FOR COMPRESSOR HIRE SERVICE.—Modern DIESEL MACHINES, lorry-mounted, also portable.—Telephone LEACH, Waltham Cross 25161.

PARDIX PLANT
FOR HIRE

DROTT SHOVELS, BULLDOZERS, DINKUMS and all Contractors' plant for hire. Clearance and site preparation undertaken. Telephone: Waltham Cross 23496 and 24913.—PARDIX PLANT ENGINEERS Ltd., 62-72 High-street, Cheshunt, Herts.

SLOGGETTS PLANT HIRE
Dinkum Diggers—Modern Machines.—2 Burtons-road, Hampton Hill, Middlesex. Teddington Lock 1138/9.

SPRAY PLANT HIRE. A full range of Portable Electric or Petrol engine driven, one or two operator Spray Paint Outfits are available for Hire from the actual manufacturers.—VOLSPRAY, Ltd., Grosvenor Gardens House, London, S.W.1 ('Phone VICtoria 2974-5), or at Alfred-road, Gravesend, Kent. 'Phone: Gravesend 4277.

BREAKERS (Pegson, Kango, Warsop, etc.), Excavators, Mechanical shovels, Lifting Tackle, Mixers, Hoists, Pumps, Rammers, Compressors, Vibrating Rollers, Cranes, etc. Hire and Sale.—PLANT HIRE SERVICE (LONDON), Ltd., 1 Chatfield-road, London, S.W.11. Tel: BATtersea 9218.

PROPS, STRUTS, ROAD FORMS, FLOOR CENTRES, FORK LIFT TRUCKS. CONTACT: **C. EVANS & SONS LTD., "HIRE DIVISION", BURNSIDE STREET, BOW, LONDON E.3**
Tel: ADVance 5691—3 lines

DUMPERS
for
SALE or HIRE
THWAITES ¾ yd.—1 yd.—1½ yd.
DANDRIDGE'S of GREENWICH
The Greenwich Plant Depot
WOOLWICH ROAD, S.E.10
Tel. No.: Greenwich 6333 (4 lines)

ALL TYPES OF BUILDERS' & CONTRACTORS' PLANT
FOR HIRE
SYMES (PLANT) LTD.
ONGAR ROAD,
BRENTWOOD, ESSEX.
TEL. BRENTWOOD 2116 (5 lines)

DROTT SHOVELS 4 IN 1
DINKUM DIGGER MAJORS
BRISTOL DIGLOADERS
MUIR HILL 3YD DUMPERS
EARTH BORING MACHINES
PRIESTMAN EXCAVATORS
VIBRATING ROLLERS
HIRE FROM
ACWORTH
(PLANT HIRE) LTD.
207, HIGH STREET,
WALTHAM CROSS, HERTS.
WALTHAM CROSS 26211

"YOU CAN ALWAYS *HIRE* A **GREENWICH PUMP**"
GREENWICH PUMP & PLANT CO., LTD., DENHAM STREET, S.E.10.
Phone: GREENWICH 6336

MOORE'S *PORTASILO* **HIRE**
10 to 20 ton.
Tel: TOTtenham 0401 (10 lines)

FOR HIRE

★ POLE LADDERS
★ TOWER LADDERS
★ EXTENSION LADDERS
★ STEPS, TRESTLES
★ BOARDS
★ CONCRETE MIXERS

and

SCAFFOLDING

of all types

★

Immediate Deliveries

★

STEPHENS & CARTER Ltd.
731-761 Harrow Rd. N.W.10.
Tel: LADbroke 1191 (7 lines)

HIGH WYCOMBE	Tel: 3183
BIRMINGHAM	Tel: Victoria 1226
NORWICH	Tel: 47785
IPSWICH	Tel: 53236
COATBRIDGE, Scotland.	Tel: Coatbridge 525

GULLICK HYDRAULIC CONCRETE BURSTERS

CONTRACTORS SERVICES LTD.
65, EFFRA ROAD LONDON SW2
TELEPHONE: BRIXTON 4081.

dm CS25

SLOGGETTS (PLANT HIRE)
COMPRESSORS OF ALL TYPES
2 Burtons Road, Hampton Hill, Middx.
Telephone: Teddington Lock 1138/9.

CONTRACTS WANTED

Prepaid rate, 24 words, 8s. 6d.; each additional 6 words, 2s. Display 30s. per inch s. col.

CRADLES erected on time at the right price.—Ring THE PETER COX CRADLING COMPANY, GRO 2023.

STONE Restoration and Cleaning. London or Provinces. Competitive prices.—PETER COX & PARTNERS, 33 North-row, W.1. Mayfair 1306.

BRICKWORK. New, Repairs, Pointing. Greater London area.—FRENCH & BEEKE, 29 Dalberg-road, S.W.2. Brixton 5870.

C. IZATT & SON, Ltd., PAINTING AND INTERIOR DECORATING CONTRACTS Required. Competitive prices. Members of the National Federation.—36 Orchard-road, Dagenham, Essex. DOM 4660 and MITcham 4127.

BRICKWORK SUB-CONTRACTS wanted in and around London. First-class work guaranteed at reasonable prices.—A. P. ADKIN, Ltd., 73 Crouch Hall-road, Hornsey, N.8. Mountview 2491.

JURA ASPHALTE invites inquiries for asphalt FLAT ROOFS, GUTTERS and COLOURED FLOORS. Prompt work and keen quotations.—407 Wandsworth-road, S.W.8. MAC 3600.

SOILING, SEEDING and TURFING. Work undertaken in any part of U.K. at competitive prices.—GILLAM, Purley. UPLands 9222/6.

"In the right place—at the right time."
For hire with guaranteed service:
Bulldozers, Scrapers, Excavators,
Air Compressors, Pumps, Hoists, etc.

PLANTIRE LIMITED,
79, ECCLESTON SQ., S.W.1
Tel.: VIC. 9161

CENTRAL FLOORING CO.
Wood Block Flooring Contractors
PARQUETRY and HARDWOOD STRIP FLOORS
Old Floors Repaired, Resurfaced and Polished as New
All enquiries promptly attended to
OFFICE AND WORKS:—
14 HAMILTON LANE, HIGHBURY, N.5
Tel: CANonbury 7313

CASWELL Tel.: RIVerside 8922/5

CRANES

& ERECTION LTD.
GROVE WORKS, HAMMERSMITH, W.6.
MANUFACTURE for SALE or HIRE

GUY DERRICKS
From 3 to 100 tons

LIFTING DERRICKS
From 1 to 100 tons—200 ft. High

WINCHES HAND or POWER OPERATED
10 tons capacity direct

BOGIES

Also HIRE *to any gauge for any load* SCOTCH DERRICKS
up to 15 Tons—195 ft. Jibs.

Birmingham Office:
156, Charles Henry Street,
Birmingham 12.
Tel.: Birmingham MIDland 7063/4

Exclusive HIRE AGENTS for ANDERSON GRICE CRANES

R. W. LOCKWOOD
"Syndal," Pipps Hill Rd., Grays Hill, Billericay, Essex
Telephone: BASILDON 217
Plastering & Granolithic Contractors
345 GREEN LANE, SEVEN KINGS, ILFORD
Telephone: SEVEN KINGS 7551

ND&H

TUBULAR SCAFFOLDING AND CRADLES CONTRACT
HIRE or SALE
Speedy Service. Competitive Prices
NICOLL, DAWSON & HUMPHRIES, LTD.
1, Southern Grove, Mile End, E.3
Tel.: ADVance 1927-4511

FLOORS
PARQUET · STRIP
WOOD BLOCK
IN THE BEST HARDWOODS
laid and polished. Also existing Wood floors re-surfaced and polished by machines. Send for details:
Wachal
FLOORING CO.
52 ROCHESTER ROW, S.W.1
Phone: VICtoria 0687

4/3 MIXERS 'HALF' BAG
FOR HIRE
30/- PER WEEK
PETROL OR ELECTRIC — 1 PHASE
JOHN MACNAMARA & CO. LTD.
Bush Rd., Deptford, London, S.E.8 Bermondsey 3275-1435

MOORE'S ROLLER HIRE

Wallis & Steevens 2½ to 10 ton.

Tel: TOTtenham 0401 (10 lines)

ELIMINATE RUST and MILL SCALE

SHOT BLASTING & METAL SPRAYING CO. LTD.
SILWOOD ST., BERMONDSEY, LONDON, S.E.16.
Tel. BERMONDSEY, 1131

S. BENNETT & SON FLOORING LTD.

WOOD BLOCK · PARQUET
HARDWOOD T. & G. STRIP
THERMOPLASTIC
P.V.C.—CORK
RUBBER
LINO

CRAFTSMEN IN FINE FLOORINGS

Specialists in the
REPAIR
RENOVATION
REPOLISHING
OF EXISTING FLOORS

APPROVED CONTRACTORS FOR "BULGOMME" SILENCE RUBBER.

TYNE HALL, HAINAULT STREET, ILFORD, ESSEX
TELEPHONE: **ILFORD 3300**

G. BARTER & CO., Industrial Decorative Spray and brush painters (labour only or contract). We supply equipment.—1a Whitton-way, Hounslow, Middlesex. HOUnslow 9615. SOUthall 3815.

ALL types of Labour Only or Labour and Material PLASTERING carried out.—'Phone: A. FRENCH, Ltd., Primrose-road, E.10. LEY 1964.

CARPENTRY SUB-CONTRACTORS (Qualified) London, Home Counties and South. Quotations from drawings, bills of quantities priced, or negotiate. All types of work.—H. R. HAYWARD, Ltd., 3 Kevington-drive, St. Pauls Cray, Kent. Orpington 30433.

FORM WORK. 1st and 2nd Fixings, in and around London. First-class work. Strength 30 carpenters. Fully mobile.—HAINES & SON, Ltd., 86 Atlantic-road, Brixton, S.W.9. Tel.: BRI 7260 and 2977.

HEATING AND PLUMBING, industrial and commercial including gas, oil fired, and domestic small-bore.—PERRY HEATING & PLUMBING CO., 81 Sunny Bank, South Norwood, S.E.25. ADD 3091.

ERECTION and DISMANTLING. Structural steel work and all types of prefabricated components. Speedy and efficient service.—ERECTORS, 80 Bulwell-crescent, Cheshunt, Herts. Waltham Cross 22564.

BRICKWORK, POINTING and ALTERATION CONTRACTS wanted in London and Hertford areas.—I. M. ALLAN, 1 Briarley-close, Broxbourne, Herts. Tel.: Hoddesdon 2903.

POINTING CONTRACTS wanted. Old or new to any amount. Town or country; good following.—GREEN BROS., 7 Brockley House, Alvey-street, S.E.17. 'Phone: ROD 7707.

BRICKWORK WANTED. Large or small contracts.—TUD 7713.

CARPENTRY-JOINERY FIXING CONTRACTS WANTED. Dry-partitions, new work. Conversions. Prompt quotations.—Ring LAD 1594 or write WYFORDS, 64 St. Marks-road, W.10.

BRICKWORK WANTED, old or new, labour only.—C. T. SADLER, 79 St. Andrews-road, Walthamstow, E.17. Larkswood 5380.

POINTING WANTED, any amount, new or old work. First-class work, reasonable prices.—E. H. PINN, 110 Boyson-road, S.E.17. HOP 2456.

POINTING WANTED, old or new. First-class Labour only.—A. J. O'DELL, Pointing Contractor, 71 Lamerock-road, Downham, Bromley, Kent.

CARPENTRY SUB-CONTRACTORS. Reliable gang (Qualified). Labour only. Curtain Walling, Pre-fabricated Components. Suspended Ceilings. First and 2nd fixing. Travel anywhere.—75 Aldrich-avenue (Tile Hill North), Coventry, Warwick.

BRICKWORK, Labour Only, Excavations, Groundwork, Drains, Concrete, Oversight. Any quantity, manual industrial, housing.—HUGHES, 55 Silverdale-road, St. Pauls Cray, Kent.

BRICKWORK (Old), Pointing, Alterations, Painting. Town or Country.—KING, 30 Queens Park-court, Paddington, W.10. LAD 8580.

"CHASING" in Brick Breeze and Pot walls executed without damage. Forty-eight hours' notice.—"ABRACUTS," 6, Crossgates, Stevenage, Herts. Telephone: Stevenage 1602.

ALL FOUNDATION WORK, Roads, Sewers, Site clearing, Demolition, etc.—T. F. MARTIN, Groundwork and Building Contractor, 47 St. Kilda's-road, Harrow 6044.

L. A. BRIGGS BROS., Plumbing Contractors, 8 York Hill, West Norwood, London, S.E.27. Tel. GIP 4927, BAL 7427.

JAMES JOINERY
All classes of work executed.
Individual or Repetition items, DOORS, SASHES, STAIRCASES, SHOP FITTINGS, AND SHOP FRONTS, ETC.
Sawing, Planing and Mouldings
ROMSEY WORKS
2, COMMERCIAL WAY, S.E.15
RODney 5151

WALL & FLOOR TILING
TILED FIREPLACES
WALTER TAYLOR
(BELMONT) LIMITED
General Builders' Merchants

Office: 112, WINDERMERE ROAD COULSDON, SURREY Tel.: UPLANDS 4421
Works & Depot: STATION ROAD BELMONT, SURREY Tel.: VIGILANT 8037/8

Phone for our representative to cal

HOOK'S JOINERY
WORKS LTD.
BECKENHAM 2246

WANTED—PAINTING and DECORATING By Contract or Measurement. Est. 1925 All work Guaranteed to your entire satisfaction G. & H. HOUSDEN, 21, Stafford Road, Wallington. Phones: Wallington 9848 Pollards 1975

MASTIC SEALING AND POINTING
Whenever you require Mastic Sealing, pointing or weather proofing treatments get in touch with Expandite Limited, who can arrange for contract work to be carried out throughout the country.
EXPANDITE LIMITED
CHASE ROAD, LONDON, N.W.10 Telephone ELGar 4321 (10 lines)

NELSON & CO. (Joinery) LTD.
For fixing only
High Class Hardwood Joinery
2 St. John's Rd.,
Hampton Wick,
Kingston-upon-Thames
TEDDINGTON LOCK 3554

E. J. WRIGHT
Plastering and Granolithic Contractor,
7 Oster-terrace, Walthamstow, E.17.
Telephone: COPpermill 3021.

R. C. (STEEL) LTD.
FABRICATORS AND STOCKHOLDERS OF REINFORCING BARS
WEYBRIDGE 5732
STATION YARD
ADDLESTONE
WEYBRIDGE
SURREY

BRICKWORK WANTED
We are able to take on some contracts from the 9th March, 1961.
W. ARMITT
Brickwork Contractors,
6, Trent Avenue, Ealing, W.5.
EALing 6919.

CONTRACTORS WANTED

BRICKLAYER, Sub-Contractor, Labour Only, Required. Large factory contract East End. Approximately ½ million Flettons fair faced to be completed in six weeks commencing April. Send full details of labour strength, previous employers, prices to Box 3991, "The Builder."

SUB-CONTRACTOR (Labour only) BRICKLAYERS Required for West London and East Sussex areas.—Box 4096, "The Builder."

SUB-CONTRACTOR (Labour only) CARPENTERS Required for West London and East Sussex areas.—Box 4097, "The Builder."

PATENTS & TRADEMARKS

"SWAN FLOORING" is the Registered Trade-mark of Fine Hardwood and Softwood Flooring. Manufactured in this country by J. H. & F. W. GREEN, Ltd., Charlton Sawmills, Singleton, Chichester, who will gladly send stock lists and price lists on request

THE Proprietor of Patent No. 760780 for "Improvements in or relating to a Combined Internal-Combustion Engine and Air-Compressor Assembly," desires to secure commercial exploitation by Licence or otherwise in the United Kingdom.—Replies to Haseltine Lake & Co., 28 Southampton Buildings, Chancery-lane, London, W.C.2.

THE PROPRIETOR of British Patent No. 685157, entitled "Building Blocks," offers same for license or otherwise to ensure practical working in Great Britain.—Inquiries to SINGER, STERN & CARLBERG, 140 So. Dearborn-street, Chicago 3, Illinois, U.S.A.

LEGAL NOTICES

IN THE ESTATE OF PERCIVAL JAMES PRESTON Deceased

Trustee Act 1925

Persons claiming to be interested as creditors or beneficiaries in the Estate of PERCIVAL JAMES PRESTON late of 6 Decoy-avenue Hendon N.W.11 Builder who died on the 6th day of February 1961 and whose Will dated the 31st Day of July 1956 with two Codicils thereto dated the 31st day of December 1959 and the 27th day of January 1961 appointed ARTHUR FRANK STUCK and DAVID BERYL JENKINS both of 41 Kingsway W.C.2. Executors thereof are required to send written particulars to the undersigned by the 6th day of May 1961 after which date the Executors will distribute the deceased's Estate having regard only to valid claims then notified.

Robertson Martin & Co.,
41 Kingsway, W.C.2

AGENCIES

MANUFACTURERS seeking to increase their sales in Scotland may secure reliable agents by writing with particulars to the Secretaries of the Scottish Association of Manufacturers' Agents, who will advertise under a box number in the Association News Letter.—Write to Dept. B, HOURSTON, MACFARLAND & CO., 5 St. Vincent-place, Glasgow, C.1.

PUBLIC NOTICES

HAMMERSMITH TOWN HALL.—Assembly Hall Suite and/or Small Hall available for Dances, Dinners, Dinner/Dances, Concerts, Conferences, Meetings, etc. Catering by the Council's Catering Service.—Inquiries: RIVerside 3020 (Ext. 41).

PARTNERSHIPS, PRACTICES, ETC.

DEVELOPER, building Block of Luxury Flats on South Coast, desires contact BUILDING CONTRACTORS interested in Tendering and Financing scheme.—Box 4090, "The Builder."

SALARIED PARTNERSHIP, with 3-year trial period, offered to qualified (R.I.C.S. only), experienced and energetic QUANTITY SURVEYOR in new practice in West Indies. Age limits 30/40. Applicants must be capable of handling schemes of any magnitude from approximate estimate stage to final account, fast and accurate in taking-off and not above squaring dimensions when occasion demands.—Applications which do not completely meet above requirements, will not be considered.—Write, giving full details to C. T. R. KELLY & PARTNERS, 8 Manchester-square, London, W.1.

EDUCATIONAL

INTERIOR DESIGN AND DECORATION. The Rhodec School offers a home study course in interior design and decoration. Course 1 for professional use, Course 2 for personal use about your home.—Send 4d. stamp for booklet to Dept. "B," RHODEC SCHOOL, 23 Slater-street, Liverpool 1.

BUILDING TRADE COURSES

Postal courses in Building Construction, Science, Quantities, Estimating, Steelwork, Concrete, Surveying, Bookkeeping, etc., and for L.I.O.B., M.I.C.W., M.R.S.H., A.I.B.E., A. Blg. S.I., Building Inspector, City & Guilds, G.C.E., etc. Revision Courses also available. Send for booklet "Building Opportunities."

THE ELLIS SCHOOL,
2, ALBANY HOUSE, WORCESTER
London Office:
103a, Old Brompton Road, London, S.W.7

156-PAGE HANDBOOK

FREE!

TO AMBITIOUS BUILDING MEN

Every ambitious building man should read **"ENGINEERING OPPORTUNITIES."** This informative guide gives details of **A.M.I.C.E., A.R.I.B.A., F.R.I.C.S., A.I.O.B., M.R.S.H., A.I.Q.S.,** etc., and outlines the widest range of Home Study Courses in all branches of **Architecture, Building, Surveying, Heating and ventilating, Costing, Valuations, Timber Technology, etc.**

Full details of our "NO PASS—NO FEE" terms are given in our handbook. Tell us what interests you and this useful book, which explains the easy way to increase your technical knowledge and personal prestige, will be sent FREE and without any obligation

POST COUPON

(write if you prefer not to cut this page)

Please send me 156-page Handbook—FREE.

NAME _____

ADDRESS _____

_____

SUBJECT OF INTEREST

BRITISH INSTITUTE OF ENGINEERING TECHNOLOGY
824, College House,
29-31, Wright's Lane,
London, W.8.

BIET

I.Q.S. R.I.C.S. R.I.B.A. I.A.A.S.

Postal courses conducted in preparation for full syllabus or single subjects. Special arrangements made for students wishing to revise or supplement studies. Write to Principal, A. B. Waters, F.R.I.B.A., F.I.Arb.

THE ELLIS SCHOOL
103a, Old Brompton Road, London, S.W.7
Ask for DAS booklet. *and at Worcester*

R.I.B.A. & T.P.I. EXAMS

STUART STANLEY (Ex. Tutor School of Arch., Lon. Univ.) & G. A. CROCKETT, M.A./B.A., F/A.R.I.B.A., M./A.M.T.P.I. prepare students by correspondence tuition. 10 Adelaide St., Strand, W.C.2. TEM. 1603/4

LAND, PREMISES, ETC.

BUILDERS and Contractors Require YARD, STORES and WORKSHOP in South London up to 5,000 sq. ft.—Box 978, "The Builder."

FULLY FURNISHED and Equipped Offices for professional firm in Baker-street. Nearly 3 years' lease, probable renewal. Furniture comprises carpeting, desks, drawing benches, chairs, filing cabinet, stationery cupboard, etc. Equipment comprises Gestetner duplicator, electric calculator, Burroughs adding machine (both to 11 figures), typewriter, drawing boards. Rent moderate. Price for all as described and lease £485.—Enquiries to Box 4115, "The Builder."

LAMBOURN, Berks. BUILDING SITE FOR ELEVEN HOUSES close station. Offers invited on asking price of £8,800 freehold. Vendors are prepared to accept part payment now and balance when houses are built and sold.—CHARLES F. JONES & SON (Est. 1871), 6 Warwick-court, Gray's Inn London, W.C.1. Chancery 7823.

STOCKTON & PLUMSTEAD
Mawnan, Nr. Falmouth,

offer:—

HELFORD RIVER COUNTRY, S. CORNWALL

Delightful, secluded building land. Easy reach yachting, bathing, hunting. Handy to market town. Ref. 3000.

Apply for details of above and excellent further selection to Agents above (Tel. Mawnan Smith 228).

SITEFINDERS LIMITED
specialise exclusively in building land
SITEFINDERS LTD., Land Agents,
16, Berkeley Street, Mayfair, London, W.1.
Tel: MAYfair 5784

SALES BY AUCTION

CHELTENHAM, GLOS. BUILDING LAND. Unprecedented opportunity to acquire level 5-acre site within mile town centre. Planning permission 75 units. All services. Auction 24th March, 1961.—Further particulars from HORSLEYS, Auctioneers, Promenade, Cheltenham.

WEYMOUTH, Dorset.
About 2½ miles from the centre of the town. Popular rural position, one mile from sea.

TALBOT & READ, F.A.I.
will offer for Sale by Auction
(subject to Conditions of Sale) on
TUESDAY, 21st MARCH, 1961
at the
CROWN HOTEL, WEYMOUTH.
29½ ACRES OF
FREEHOLD BUILDING LAND
with the benefit of:
Outline and Lay-out Planning Permission for approximately 170 Residential Plots.
All main services are available.
VACANT POSSESSION.
Full particulars may be obtained from the Chartered Auctioneers.
Auction and Agency Offices: 10 Royal-terrace, Weymouth, Dorset. (Tel. 2096/7).
Solicitors: Messrs. Bowen, Symes & Lipscombe, 7 Clarence Buildings, Weymouth. (Tel. 3555).

By Order of the Directors of Messrs. Walker (Tooling) Ltd.
HACKBRIDGE INDUSTRIAL TRADING ESTATE,
HACKBRIDGE-ROAD,
Near MITCHAM

HENRY BUTCHER & CO.
are instructed to offer for SALE BY AUCTION in LOTS
at THE WORKS
on
TUESDAY, 18th APRIL, 1961,
at ELEVEN A.M. the
SURPLUS CONTRACTORS' PLANT, STORES AND EQUIPMENT
including
100,000 FT. RUN SCAFFOLD BOARDS
PORTABLE CONCRETE MIXERS
120,000 FT. STEEL SCAFFOLDING
6,500 PUTLOGS. 4,000 UNIT FRAMES
"ACROW" PROPS AND FITTINGS
HOISTS. CONTRACTORS' PUMPS
BARROWS, TRUCKS, TROLLEYS,
LADDERS, STEPS, TRESTLES,
PORTABLE SAWS. AIR COMPRESSORS
R.W. Pipes and Fittings. Paints.
PORTABLE SHEDS AND BUILDINGS
Contractors' Hand Tools. Fencing. C.I. Sheets
Tarpaulins.
"BEDFORD-SCAMMELL" UNIT WITH LOW LOADER AND TRAILERS. TIPPING LORRIES.
STOCK OF TIMBER. WOOD SLEEPERS
MACHINE TOOLS AND ENGINEERS' STORES
Roofing Tiles. Bricks. Concrete and Breeze Blocks.
OFFICE FURNITURE AND EQUIPMENT
Catalogues (when ready) may be obtained of:
Messrs. HENRY BUTCHER & CO., 73 Chancery-lane, London, W.C.2. Telephone: HOLborn 8411 (8 lines).

By order of the DIRECTORS of MESSRS. GEORGE LEWIS (TIMBER MERCHANTS) LIMITED due to Sale of the Freehold Property

Messrs. FULLER HORSEY SONS & CASSELL
have been instructed to offer for SALE by AUCTION in Lots on the PREMISES at
CAVERSHAM-ROAD, READING, BERKS.
on
TUESDAY, 14TH MARCH, 1961,
at 11 a.m. precisely
SAW MILLING, and other WOODWORKING PLANT AND MACHINERY
including: Ransome-Pickles 48 in. HORIZONTAL BAND MILL, RACK SAWS, CIRCULAR SAW BENCHES, PLANNING AND MOULDING MACHINES, BANDSAWS, SAW DOCTORS PLANT, GRINDING MACHINES, 7½-ton MANUAL OVERHEAD TRAVELLING CRANE, Garrett 250 h.p. Steam Engine and Boiler Water Softening Plant, 90 k.w. Alternator, 3 Bedford 50 cwt. Petrol Trucks, Tasker pole trailer, etc.
ENGLISH HARDWOODS
including PRIME OAK BOARDS AND PLANKS, BEECH, CHERRY AND ELM BOARDS AND PLANKS, OAK POSTS, ELM PIT COVERS
17 STANDARDS FOREIGN SOFTWOODS
including JOINERY AND CARCASSING GRADE BOARDS AND PLANKS, PINE BOARDS AND PLANKS, and PLYBOARDS, HARDBOARDS, DOORS, MOULDINGS, BATTENS, ETC.
Catalogues (when ready) may be obtained of Messrs. FULLER, HORSEY SONS & CASSELL, Industrial Auctioneers and Valuers, 10 Lloyds-avenue, London, E.C.3.

APPOINTMENTS OPEN

Prepaid, twenty-four words, 8/6; each additional six words, 2/-. Box number, including forwarding replies, 2/-.

L.I.O.B., A.R.I.C.S., R.I.B.A., A.M.I.C.E., etc., on "NO PASS—NO FEE" terms. Over 95 per cent. successes. For details of Exams. and Courses in all branches of Building, Surveying, Civil Eng., Timber Technology, Forestry, etc., write for 148-page handbook.—FREE.—B.I.E.T. (Dept. 710), 29 Wright's-lane, London, W.8.

ARCHITECTS

RONALD WARD AND PARTNERS

invite applications from ARCHITECTS, Senior and junior. Long-term prospects. Scope for initiative and responsibility in interesting commercial, industrial and civic projects in British Isles, West Africa and Australia. Salaries commensurate with ability. Non-contributory Pension and Life Insurance schemes. Five-day week. Pleasant offices. Apply 29 Chesham-place, Belgrave-square, London, S.W.1. Tel.: BELgravia 3361.

£1,000-£1,350. ASSISTANTS and ASSISTANT ARCHITECTS Required within this salary range on a variety of projects including schools, universities, and T.V. studios. Qualification in landscape architecture an advantage which would affect salary. Large progressive office offering outstanding opportunities for people of ability, both at home and overseas. Excellent working conditions, five-day week, three weeks' annual leave, lunch vouchers, bonus scheme and generous sick pay provision.—Write or telephone NORMAN & DAWBARN, Architects and Consulting Engineers, 7 Portland-place, London, W.1. LANgham 8011.

ARCHITECTS with some experience Required by expanding City practice. Salaries to £1,400 for right men. Every opportunity for initiative and responsibility.—Box 4141, "The Builder."

THE LONDON ASSOCIATION OF BUILDERS' FOREMEN AND CLERKS OF WORKS

Memorial Hall, Farringdon Street, London, E.C.2

★ **Provides against Unemployment and Death**

★ **Pensions for Aged Members or Widows**

★ **Applications for Membership invited**

Experienced Foremen and Clerks of Works can be obtained by applying to the Secretary

Mr. J. S. Rigden
50 WARREN ROAD
BANSTEAD, SURREY

ARCHITECTS. Qualified and of Intermediate Standard Required in London City office. Opportunity for ambitious men. Permanent positions with generous salary, luncheon vouchers, five-day week.—Write, Box 4225, "The Builder."

IMMEDIATE VACANCIES in leading Bristol office for all grades of ARCHITECTS and ARCHITECTURAL ASSISTANTS. Modern approach to design essential and considerable freedom of expression allowed. Top salaries paid according to ability and experience. Outstandingly good working conditions; 5-day week; annual bonus; contributory pension scheme available; existing holiday commitments honoured.—Apply, giving particulars of age and experience, to W. H. WATKINS, GRAY AND PARTNERS, 8 Colston-avenue, Bristol. Telephone Bristol 292333, reverse charge calls accepted.

ARCHITECTS

IND COOPE LIMITED,

National Brewers, require Senior Assistant Architects at the Company's Head Office at Burton-on-Trent, within the salary range: £1,150—£1,500.

The Company has an extensive programme in connection with industrial buildings and hotels giving opportunities for personal initiative and development.

Senior Assistants, who must be Associates R.I.B.A., will be expected to take charge of projects with minimum supervision.

The Company operates a Pension Scheme with substantial widows' benefits in the event of death before or after retirement. Five-day week.

Enquiries (which will be treated in the strictest confidence) specifying the vacancy and giving details of experience, age, present and past employment and stating salary required, should be addressed to the

Group Architect, Ind Coope Limited, Burton-on-Trent.

FARMER AND DARK

require

ASSISTANT ARCHITECTS

with some office experience, initiative and ability. Varied work.

Apply Romney House, Tufton Street, S.W.1. Tel: ABBey 6311

WIMPEY

The Architects Department's current programme covers all types of commercial, industrial and domestic building projects.

Appointments are available for a wide range of experience particularly for ARCHITECTS and ASSISTANTS who appreciate the contribution good design can make towards efficient construction and are interested in applying cost knowledge to detailing.

Appointments on a permanent basis are immediately available at Head Office with good progressive salaries for the right man. Five-day week; three weeks annual holiday.

Similar appointments are also available in our Regional Offices for applicants preferring to work in the Midlands or North of England areas.

Applicants should write to:

E. V. Collins, A.R.I.B.A., Chief Architect,
GEORGE WIMPEY & CO., LIMITED,
27 Hammersmith Grove, London, W.6.

Central Electricity Generating Board

TRANSMISSION PROJECT GROUP

GUILDFORD

(a) Assistant Architect

Applications are invited from Fellows and Associates of the R.I.B.A. for the above post in the Civil Engineering Branch at Guildford, Surrey. The desirable age limits are 35-40 years: a planning qualification would also be an advantage.

The duties are to give day-to-day advice concerning the problems of architectural design and the amenity considerations associated with the siting and construction of high voltage transmission switching stations.

● Salary within the scales £2,380—£2,595 p.a.

(b) Architectural Assistant

The successful candidate will act as assistant to the Assistant Architect. Draughtsmanship, a good design sense and the ability to detail buildings and other structures are the essentials. A recognised qualification and Associate membership of the R.I.B.A. is also a prerequisite.

● Salary within the scale £1,650—£2,085 p.a.

Applications stating age, qualifications, experience, present position and salary, and indicating post applied for, to the Appointments Officer, 24/30, Holborn, London, E.C.1, by 21st March. Envelopes should be marked "Confidential Ref. BU1/95"

ARCHITECT

required by Estate Developer, must be experienced in small house/bungalow design and first class draughtsman able to produce practical working drawing and have good design sense.

Salary up to £1,400 a year. New house or bungalow can be provided.

Applicants please apply in writing stating experience and age to

Box No. 4260, "The Builder"

ARCHITECTS ASSISTANTS

BOOTH, LEDEBOER AND PINCKHEARD Require ASSISTANTS in the salary range £750-£1,250.—Apply 17-20 Mason's Yard, Duke-street, St James's, S.W.1. Tel.: TRAfalgar 1866.

SOUTHAMPTON. ASSISTANT of Intermediate standard Required for interesting contracts in the Southern Counties.—Apply with details of any previous office experience and required salary, to E. M. GALLOWAY & PARTNERS, F./A.R.I.B.A., 10 Portland-street, Southampton.

JUNIOR ARCHITECTURAL ASSISTANT (G.C.E.) Required for small office. Good opportunity for intelligent person willing to learn.—Write, or 'phone: NICHOLSON & RUSHTON, 2 New Square, Lincoln's Inn, W.C.2. HOLborn 2095.

ARCHITECTS in Watford and London Require capable ASSISTANTS with at least three years' office experience, for work on interesting commercial and industrial projects. Salary range £800-£1,200 per annum. Non-contributory pension scheme.—Apply Box 975, "The Builder."

INFORMATION ASSISTANT Required urgently to fill vacancy occurring in information department of large architectural and engineering office. Department deals with all technical information, samples photographic library and records, and carries a staff of one or two information assistants under a senior Librarian. Knowledge of building industry is not essential, but some experience of, and interest in, technical libraries or information departments is required. Excellent working conditions, 5-day week, three weeks' annual leave, lunch vouchers, etc.—Write to NORMAN & DAWBARN, Architects and Consulting Engineers, 7 Portland-place, London, W.1.

NORTH & PARTNERS, Chartered Architects, 40/42 Broadway, Maidenhead, Berkshire, seek two new ASSISTANTS: (1) Partner's Personal Assistant for general Architectural and administrative duties. (2) Experienced Architectural Assistant/Architectural Draughtsman for main Drawing Office. Five-day week, Pension scheme, etc. State age, experience and salary required.

WOLVERHAMPTON. NORMAN & DAWBARN Require an ASSISTANT in their Midlands office. This position could afford useful experience of small and medium size jobs in a young but expanding office, with possibility of later transfer to London office or overseas if desired. Minimum two years' office experience required if qualified, four years if intermediate. Excellent working conditions, five-day week, three weeks' annual leave, lunch vouchers.—Write or telephone 7 Portland-place, London, W.1 (LANgham 8011), or Heantun House, Salop-street, Wolverhampton (Wolverhampton 27387).

OPPORTUNITY for frustrated, Intermediate ASSISTANT, with initiative and imagination, unable to find post offering freedom in design or chance to take charge of projects.—Write or 'phone: NICHOLSON AND RUSHTON, 2 New-square, Lincoln's Inn, W.C.2. HOLborn 2095.

ARCHITECT'S JUNIOR ASSISTANT Required. Good draughtsman detailer, intermediate standard.—Please write, stating age, experience and salary, to: R. JELINEK-KARL, F.R.I.B.A., 6 Buckingham-street, W.C.2.

ARCHITECTURAL ASSISTANTS Required in busy Bloomsbury office with varied practice. Good salary and prospects for suitable applicants. 5-day week.—Write, giving particulars of age, qualifications, experience, etc., to Box 918, c/o 7 Coptic-street, W.C.1.

WILLIAM HOLFORD & PARTNERS (City office) Require ARCHITECTURAL ASSISTANT of Intermediate/Final standard, office experience an advantage. Varied programme of work including university buildings. Five-day week, luncheon vouchers and pension scheme in operation. Salary £750 to £1,000 according to ability.—Write giving full details to Adelaide House, London Bridge, E.C.4. (Tel.: MINcing Lane 7387.)

ARCHITECTURAL ASSISTANT Required for medium-size office in pleasant surroundings for varied work, housing, churches, community buildings, etc. Pension scheme, canteen facilities, car allowance, housing accommodation available. Salary range £850 to £1,000 according to experience.—Apply S. J. CLEWER, F.R.I.B.A., Bournville Village Trust, Oak Tree-lane, Birmingham 30.

WE are seeking the services of young ambitious ARCHITECTURAL ASSISTANTS in the £1,000 per annum range. This new and expanding organisation offers scope for both advancement and talent which is rewarded by a generous Bonus Scheme. Ability is considered as important as qualifications.—Apply for selection to Box 4095, "The Builder."

ARCHITECTURAL ASSISTANTS up to R.I.B.A. Intermediate Standard Required for work on traditional and prefabricated projects. Programme includes multi-storey flats, schools, etc. Day release for attendance at recognised schools. Canteen and sports club facilities.—Apply, giving full details of experience salary required, etc., to Chief Architect, MESSRS. W. J. SIMMS SONS & COOKE, Ltd., Building and Civil Engineering Contractors, Haydn-road, Sherwood, Nottingham. Telephone: Nottingham 66264.

ARCHITECTURAL ASSISTANT

required by Essex Contractors for Estate Layout, Design of Properties, etc. This situation offers a varied and interesting position including Levelling, Setting Out Estates and Land Negotiation.

Permanent, progressive and pensionable position to successful applicant. Write in full detail, stating age, experience, and salary required, to:

Box No. 4314, "The Builder"

Architectural Assistant

with experience required in Luton office. Interesting and varied work, excellent prospects and working conditions. Pension scheme. Ring or write:

CONNELLS
Architectural and Survey Department,
5 Upper George Street, Luton.
Tel: Luton 5910-4

SENIOR ARCHITECTURAL ASSISTANTS

required immediately for responsible positions in the Architects' Department of a large Multiple Retail Company with offices in London. Sound knowledge of building construction and practical experience essential.

Five-day week, superannuation scheme, dining-facilities.

Salary £900—£1,400 p.a., according to age, experience and qualifications.

Write giving full details and salary required to:

Box No. 4231 "The Builder"

EAST ANGLIA

QUALIFIED & INTERMEDIATE

ASSISTANTS

required by

IND COOPE
(EAST ANGLIA) LTD.

Sound training and experience together with an interest in interior design essential. Salary range £600—£1,500.

The Company operates a Pension Scheme with substantial widows' benefits in the event of death before or after retirement.

Five day week. Write, giving age, salary (at present, or required) and full details of training and experience to the

Architect,
Ind Coope (East Anglia) Ltd.,
The Brewery,
Romford.

PLANNING ASSISTANT Required by medium-sized Contractor. Experience not necessary but initiative essential. Permanent and progressive position with pension scheme.—Write, full details of experience, age and salary required, to POCHIN (CONTRACTORS), Ltd., Middlewich.

MANCHESTER. Required, ASSISTANTS with progressive outlook for work on a wide range of interesting projects including schools, houses and flats, churches, youth centres, industrial and hospital work. Pension scheme, bonus scheme, salary up to £1,200 per annum according to experience and ability.—Apply, in writing, to TAYLOR, YOUNG & PARTNERS, 195 Oxford-road, Manchester, 13.

KENNETH WAKEFORD, JERRAM & HARRIS Require up to four supporting staff of Intermediate Standard. Five-day week, luncheon vouchers. Salary according to experience.—7 Connaught-place, London, W.2. PAD 9281.

£1,000-£1,200 P.A. ARCHITECTURAL ASSISTANTS Required for the Architects' office of a large industrial organisation specialising in food production. Intermediate standard with minimum of five years' experience in industrial work. Knowledge of London Buildings Acts essential. Five-day week; pension scheme; meal facilities; sports club.—Apply in writing to Box 4128, "The Builder."

ARCHITECTURAL ASSISTANTS of all grades, particularly Inter. standard, Required on varied and interesting projects. High salaries will be paid in accordance with skill or experience of applicant.—LEWIS SOLOMON, KAYE & PARTNERS, City 8811.

ARCHITECTURAL ASSISTANT of Intermediate/Final standard Required for interesting general practice; good light offices; holiday arrangements with pay will stand. Salary according to ability and experience.—Full details to BOWDEN SON & PARTNERS, 3 Adelaide-terrace, N.1.

ARCHITECTS in London Require ARCHITECTURAL ASSISTANTS of Intermediate standard for interesting and varied projects. Good salaries paid. Five-day week. Luncheon vouchers.—Box 4099, "The Builder."

ARCHITECT'S ASSISTANT Required up to Intermediate standard. An interest in Farm Buildings an advantage, but not essential.—Apply, W. A. J. SPEAR, L.R.I.B.A., 36 Cattle Market-street, Norwich, Norfolk. NOR 27B.

ASSISTANT Required for Architectural partnership in Norwich to work on interesting and important schemes. A happy office in a fine city. Salary range £800 to £1,200.—A. F. SCOTT AND SONS, 23 Tombland, Norwich.

STAFF ARCHITECT in West End, willing to pay up to £1,000 p.a. for ASSISTANT approaching Finals standard but with practical working knowledge to help in running medium-sized Contracts. Five-day week. Holidays to be arranged.—Please reply to Box 4194, "The Builder."

WE are about to commence planning unusually interesting projects in which a qualified FIRST ASSISTANT and a SECOND ASSISTANT are invited to join us in our new spacious offices. We are close to central transport facilities and within easy reach of London. Appointments to be made so that planning can begin soon after Easter.—Anthony R. Dannatt, F.R.I.B.A., A. R. DANNATT & SON, 65A Duke-street, Chelmsford. Telephone 58121.

DESIGN-CONSCIOUS ASSISTANT of at least Intermediate standard Required to play responsible part in large programme of works.—Apply, Gerald Deighton, A.R.I.B.A., RADIO RENTALS, Ltd., Seymour Mews House, Wigmore-street, London, W.1. WEL 9191.

ASSISTANT Required by London Architects and Surveyors for general practice.—Write, stating experience, training, age, salary required, and when available, to Box 4268, "The Builder."

SENIOR and JUNIOR ARCHITECTURAL ASSISTANTS and DRAUGHTSMEN

required by Multiple concern in London. Five-day week. Dining facilities. Superannuation. Modern office. Salary £500 to £1,500 p.a., according to age, experience, qualification and ability. Apply in writing, giving full details, to:

Box No. 3940, "The Builder"

SCHERRER & HICKS

require assistants in

LONDON & MANCHESTER

All grades

Interesting and varied work

19 Cavendish Square, W.1.
MUSeum 1105

QUALIFIED and Intermediate ASSISTANTS with experience and ability to assume responsibility. Required at Charing Cross and Croydon offices. Wide range of interesting work. Generous salaries. Pension and Life Assurance scheme.—'Phone: RICHES & BLYTHIN, WHItehall 7926 or CROydon 1776.

CROYDON. Senior and Intermediate ARCHITECTURAL ASSISTANTS Required for various large projects. Salary according to ability.—Box 4245, "The Builder."

ARCHITECT'S ASSISTANT Required immediately for busy London office. Intermediate standard or previous office experience. Salary according to experience and ability.—Apply Box 4250, "The Builder."

LEICESTERSHIRE. HENRY GODDARD & PARTNERS Require ASSISTANT of Inter./Final R.I.B.A. standard for country practice. Varied work, opportunity for responsibility. Salary by arrangement, 5-day week. Lunch provided.—Telephone Great Glen 289 or write Newton Harcourt Manor.

AN EXPERIENCED ARCHITECTURAL ASSISTANT, Intermediate to Final standard, Required immediately to work on large projects in the City and West End of London. Salary range up to £1,200 plus luncheon vouchers. Pension scheme and other staff amenities. Small office with opportunity for advancement.—Write to W. H. ROGERS, A.R.I.B.A., 16 Mark-lane, E.C.3, or telephone MINcing Lane 3123.

PART-TIME ARCHITECTURAL ASSISTANT, male or female, Required for small busy central office. Good salary to right applicant.—Ring COV 2088.

ARCHITECTURAL ASSISTANT Required in Guernsey. Single status preferred. Small office with interesting contemporary work including post office, hotel and private houses. Salary according to ability.—Apply, O.T.S., 4 Lion-street, Kidderminster.

DESIGNERS

DESIGNER of all types of Reinforced Concrete work Required by INDENTED BAR & CONCRETE ENGINEERING CO., Ltd., 171 Victoria-street, London, S.W.1.—Apply, by letter only, giving full details of experience and salary required.

DRAUGHTSMEN

SANITARY ENGINEERING DESIGNER-DRAUGHTSMAN (Senior Grade) Required for interesting work on a variety of U.K. and overseas building projects working-up schemes for drainage, plumbing and cold water services in collaboration with architectural staff. Good working conditions, five-day week, three weeks' paid leave a year, luncheon vouchers. Salaries according to age and experience.—Please apply in writing to NORMAN & DAWBARN, Architects and Consulting Engineers, 7 Portland-place, London, W.1.

EXPERIENCED DRAUGHTSMEN with Ordinary or Higher National Certificate or good experience Required for permanent and responsible positions in large Architect's office in Victoria.—C. H. ELSOM & PARTNERS, 10 Lower Grosvenor-place, S.W.1. VICtoria 4304.

REINFORCED CONCRETE DETAILER and DRAUGHTSMAN Required. Five-day week, non-contributory pension scheme and bonus in operation.—Apply, by letter, giving full details of experience and salary required, to INDENTED BAR AND CONCRETE ENGINEERING CO., Ltd., 171 Victoria-street, London, S.W.1.

REINFORCED CONCRETE DETAILERS & DRAUGHTSMEN

preferably with knowledge of Building Construction, required by Precast Concrete Specialists at their Head Office near Guildford. Varied work with good prospects, superannuation, etc. Salary by arrangement, according to qualifications and experience.

Apply to:
The Senior Structural Engineer,
MARLEY CONCRETE LTD.,
Peasmarsh, Guildford, Surrey

DRAUGHTSMAN

Required by City bank. Experienced in office planning, structural alterations, joinery details. Knowledge of L.B. Acts and Bye-Laws an advantage. Permanent pensionable position for suitable candidate. Age not over 30. Write stating age, experience. Commencing salary £855 p.a. Write

Box No. 4203, "The Builder"

THE ARCHITECTS' JOURNAL Requires a good full-time DRAUGHTSMAN for the preparation of information sheets and working details. Some knowledge of line block reproduction desirable and an interest in the compilation of technical data essential.—Write to the Editor (Information Sheets), 9 Queen Anne's-gate, S.W.1, stating age, architectural training and experience.

REINFORCED CONCRETE ENGINEERS and CONTRACTORS Require DRAUGHTSMEN, experienced detailing for contracts department at head office, Harrow.—Write, full details, to BIERRUM & PARTNERS, 167 Imperial-drive, Harrow.

PROGRESSIVE COMPANY marketing demountable partitions. Requires ARCHITECTURAL DRAUGHTSMEN and Trainee immediately. Good commencing salary. Pleasant West End office, five-day week, L.V.s.—Write Box 4257, or telephone Langham 7702.

ARCHITECTURAL DRAUGHTSMEN Required for detailing precast concrete and reconstructed stone units. Applicants should be between the age of 20-30, of good appearance and character and be capable of dealing directly with architects.—Apply, in writing, to the Works Manager, Products Factory, TRENT CONCRETE, Ltd., Colwick, Nottingham.

DRAUGHTSMEN, ESTIMATORS, QUANTITY SURVEYORS. Permanent positions. Your own Bureau (no fees).—Call: BUSINESS VACANCIES BUREAU, 28 Victoria-street, Victoria, S.W.1. ABBey 7200.

DRAUGHTSMAN AND GENERAL ASSISTANT Required in London office of old-established and reputable Architectural Metalworkers. An artistic young man with some knowledge of the trade preferred but experience in shopfitting or kindred trades and willing to be trained would be considered. Excellent opportunity for a young man seeking to further his career and experince. Apply in writing giving full particulars.—Box 4192, "The Builder."

QUANTITY SURVEYORS

ASSISTANT QUANTITY SURVEYOR for London Quantity Surveyor's office, with experience of Taking-off, Interim Valuations, Measurement and preparation of Final Accounts. Must be willing to travel occasionally.—Please write giving full particulars of experience, age and salary required, to Box 971, "The Builder."

ASSISTANT Required by Chartered Quantity Surveyor, London, W.1, for research into uses and costs of new materials and to act as the information centre of the firm. Apply in writing stating age, experience and salary required.—Box 4044, "The Builder."

PETER LAWRENCE, A.R.I.C.S., Requires good ASSISTANT, of Intermediate standard, able to take-off, in his Wimbledon office.—Details to 26 Broadway, S.W.19. Telephone WIMbledon 8527.

J. P. JELLY & PARTNERS, Chartered Quantity Surveyors, Require STAFF OF ALL GRADES, including fully qualified experienced staff. Five-day week, pension scheme, overtime optional.—Apply 71 Grove-road, Hounslow.

CHARTERED QUANTITY SURVEYORS, with offices in Maidenhead and Camberley and expanding practice. Require ASSISTANTS (inter-final R.I.C.S. standard) for taking-off, site measuring and final accounts. Good salary, with excellent opportunities for advancement, congenial working conditions, overtime, bonus and non-contributory pension scheme.—Write to CLOSE & MORTON, Lloyds Bank Chambers, Maidenhead, Berks, stating age, qualifications and experience.

SENIOR ASSISTANT QUANTITY SURVEYOR Required to take charge of large contracts in Manchester and Warrington areas with possibility of eventual running of local office.—Write, stating age, experience and salary required, to Box 4174, "The Builder."

SENIOR QUANTITY SURVEYOR Required by Chartered Surveyors, Westminster. Varied work. 5-day week, overtime work if desired; pension and life assurance scheme.—Write, stating age, experience, and salary required, to Box 4175, "The Builder."

CHARTERED QUANTITY SURVEYORS in London, within easy reach of Victoria Station, Require qualified TAKERS-OFF (A.R.I.C.S.) who are prepared to offer conscientious work and accept responsibility in return for a salary of £1,000 to £1,200 a year and good prospects of advancement.—Box 4180, "The Builder."

SITE QUANTITY SURVEYOR (Intermediate Standard) Required by firm of Civil Engineering Contractors. Employment initially on site near Durham, and job offers every possibility for interesting work and excellent prospects.—Please apply, stating age and experience, to Ref. VCO, THYSSEN SHAFT SINKING CO., Ltd., 42 Coombe-road, New Malden, Surrey.

ASSISTANT QUANTITY SURVEYOR, Intermediate standard R.I.C.S., advanced stage, Required for Estimating, Taking-off, Working-up and Final Account work. Varied and interesting building work. Salary by arrangement.—Please write, stating age, experience and qualification, to OVE ARUP & PARTNERS, 13 Fitzroy-street, London, W.1.

AUSTRALIA. Vacancies for TAKERS-OFF, see advert. under heading "Overseas Appointments."

£1,200 per annum for TAKER-OFF in busy London practice. Final Standard and seeking a wide and varied experience.—Box 4051, "The Builder."

TAKER-OFF for medium-sized London practice. Commencing salary up to £1,400 per annum, according to age and experience.—Box 4052, "The Builder."

FIRST-CLASS TAKER-OFF Required for permanent position in City practice. Permanent position with a commencing salary of up to £1,500 according to ability and experience.—Box 4053, "The Builder."

HOWARD FARROW LTD.
(Building Division)
require an
ASSISTANT QUANTITY SURVEYOR

experienced in all surveying duties from commencement of contract to final account. Apply in writing with full details to:
Chief Quantity Surveyor (Ref. DJB),
Howard Farrow Ltd.,
Highfield Road,
Golders Green, N.W.11.

CO-OPERATIVE WHOLESALE SOCIETY LTD., ARCHITECT'S DEPARTMENT, MANCHESTER,
have vacancies for
QUANTITY SURVEYORS
SENIOR TAKERS-OFF

with professional experience. Membership of R.I.C.S. desirable but not essential. Five-day week. Pension Scheme. 3 weeks holiday. Applications, stating training, age, experience, qualifications and salary required to:

G. S. Hay, F.R.I.B.A., Chief Architect,
Co-operative Wholesale Society Ltd.
1, Balloon Street,
Manchester, 4.

THE LYON GROUP
require
QUANTITY SURVEYORS

to work on multi-storey office block, shop, flat, industrial and housing estate developments.

The positions offer to men with initiative and drive the opportunity to earn excellent salaries and bonus whilst engaged on interesting work in a vigorous, expanding organisation. Non contribution pension scheme and pleasant out of town offices.

Please apply in writing giving full particulars of previous experience to the Chief Surveyor,
Ronald Lyon Construction Limited,
Auckland House,
New Zealand Avenue,
Walton on Thames.

QUANTITY SURVEYOR (A.R.I.C.S., or final standard) for busy city practice.: Up to £1,400 basic salary according to capability.—Box 4054, "The Builder."

QUANTITY SURVEYORS Required. Experienced in Taking-off, Interim Valuations and Final Accounts. Large programme of varied works. Five-day week, salary according to experience.—FREDERICK IDDISON & JOHNSON, Quantity Surveyors, 27 Woodland-road, Darlington.

KUWAIT. Vacancies for QUANTITY SURVEYORS in the P.W.D. — See under heading "Overseas Appointments."

QUANTITY SURVEYOR Required. Progressive and permanent appointment. Pension scheme.—Details of experience, age and salary required, to POCHIN (CONTRACTORS), Ltd., Middlewich.

QUANTITY SURVEYOR, must be able to Take-off. Write stating age, experience and salary required.—BARNARD & PARTNERS, Architects and Quantity Surveyors, Imperial-square, Cheltenham.

QUANTITY SURVEYOR, experienced Taking-off, interim valuations and final accounts. State age, experience, salary.—Apply, by letter, to C. CORNES & SON, Ltd., 169 Lichfield-street, Hanley, Stoke-on-Trent.

QUANTITY SURVEYOR Required by Contractors for new contracts in the Derby area.—Apply in writing stating age, experience and salary required, to Box 4258, "The Builder."

QUANTITY SURVEYOR (A.R.I.C.S.) Required in Berkshire offices mainly to prepare estimates, cost plans, etc., for new projects. £1,100-£1,400 per annum, according to experience.—Write, full particulars, to Box 4228, "The Builder."

C.Q.S. FIRM, in Holborn area, present staff of 20, Requires ASSISTANTS. Age 25 to 40. Very varied work, including overseas. Good salary, luncheon vouchers, car allowance to the right men. Non-contributory pension scheme.—Application form from Box 4226, "The Builder."

ASSISTANT QUANTITY SURVEYOR Required for very small office of Chartered Q.S. in City area, London. Medium Taker-off between Intermediate and Final grade. Good scope for improvement and wide variety of work. Salary £600 to £750 plus bonus.—Box 4208, "The Builder."

TROLLOPE & COLLS LIMITED

require the services of

EXPERIENCED

Quantity Surveyors

for large building contracts in London and/or Midland areas. Must have sound knowledge of site measuring, valuations, final account preparation etc. Apply, stating age, experience and salary required, to:—

The Assistant Secretary, (Ref. S.)
Trollope & Colls Ltd.,
1, Noble Street,
Gresham Street,
London, E.C.2.

TAYLOR WOODROW (OVERSEAS) LIMITED

require

QUANTITY SURVEYOR

for London Office. Should be A.I.Q.S., experienced with Contractors and fully conversant with the measuring of all trades in preparation of Bills of Quantities for Building and Civil Engineering work. Age 30-45.

Interviews can be arranged by telephone or by writing to:—

Personnel Manager,
TAYLOR WOODROW (OVERSEAS) LIMITED,
Western House, Western Avenue, Ealing, W.5.
Telephone: PERIVALE 6641

Quoting reference QS/TWO/K6730.

CENTRAL ELECTRICITY GENERATING BOARD
QUANTITY SURVEYING SECTION

Applications are invited for the following appointments in the Transmission Project Group Headquarters at Guildford, Surrey:

(a) ASSISTANT QUANTITY SURVEYORS

Duties will include the preparation of Bills of Quantities and Accounts for building and civil engineering work required in the establishment of high voltage sub-stations.
Candidates should preferably be Associates by examination of the Royal Institution of Chartered Surveyors.
Salaries within the range £1,285-£1,610 p.a.

(b) QUANTITY SURVEYOR'S ASSISTANTS

Duties to assist as in Post (a)
Candidates must have previous experience in a Quantity Surveyor's or Contractor's office and should preferably be Students or Probationers of the Royal Institution of Chartered Surveyors.
Salaries within the range £645-£1,165 p.a. according to duties and responsibilities.

(c) JUNIOR ASSISTANT

Duties will be of a general nature in the Quantity Surveying Section and an opportunity will be given to the successful candidate to acquire experience in "Working-Up" and ultimately other aspects of a quantity surveyor's work.
Applicants must be prepared to study for and sit the examinations of one of the appropriate Institutions, the work having been accepted by these Institutions as suitable training for the profession.
Salary within the scale £225-£640 p.a. according to age and educational qualifications.
Applications, stating age, qualifications, experience, present position and salary, and indicating post applied for, to the

Appointments Officer,
24/30 Holborn, London, E.C.1,
by 17th March.
Envelopes should be marked
"Confidential Ref. BVI/89."

ASSISTANT QUANTITY SURVEYOR (A.R.I.C.S.) Required by West End firm to undertake all duties from taking-off to agreement of final account with minimum supervision. Five-day week, hours 9.15 a.m.-5.15 p.m.—Box 4301, "The Builder."

QUANTITY SURVEYOR, able to take-off and to settle final accounts, Required by London Quantity Surveyors. Salary according to age and experience. Three weeks holiday per annum.—Please reply, giving full particulars, to Box 952, "The Builder."

ASSISTANT QUANTITY SURVEYOR of R.I.C.S. or I.Q.S. intermediate standard, Required by Quantity Surveyors in London. Salary according to age and ability.—Full particulars to Box 957, "The Builder."

A. MONK AND COMPANY LIMITED

require

QUANTITY SURVEYORS AND ASSISTANTS

for Warrington, London, Middlesbrough and Hull Offices, also for sites in Lincs./Northants. and Worcester areas.
Apply, stating age and experience, to Chief Surveyor at Company's Head Office, Padgate, Warrington, Lancs.

ASSISTANT QUANTITY SURVEYOR

required age 21-24 by Q.S. section of Industrial Company to assist in measuring, preparation of final accounts, estimates and bills of quantities. Permanent and pensionable. Salary £600—£800. Write giving details age etc., to:

Chief Surveyor,
Wiggins Teape & Co. Ltd.,
Gateway House,
1, Watling Street, London, E.C.4.

SITE MEASURING SURVEYOR Required by Chartered Quantity Surveyors for varied building contracts at Crawley New Town.—Please write stating age, experience and salary required, to Box 4293, "The Builder."

CHARTERED QUANTITY SURVEYORS have vacancy for SITE QUANTITY SURVEYOR for civil engineering and building contracts at SWANSEA and LLANELLY.—Applications are invited, with details of age, experience and salary requirements, to Box 4294, "The Builder."

EXPERIENCED TAKER-OFF/MEASURING SURVEYOR Required for large-scale civil engineering and building contract at Newport, Monmouthshire. Rented accommodation available. Firm of Chartered Quantity Surveyors invite applicants to write to Box 4295, "The Builder," stating age, experience and salary required.

EXPERIENCED MEASURING SURVEYOR Required by Chartered Quantity Surveyors for building and civil engineering contract at Scunthorpe.—Apply, stating age, experience and salary required, to Box 4296, "The Builder."

SITE QUANTITY SURVEYOR Required by firm of Chartered Quantity Surveyors for long-term contract at Port Talbot.—Please apply, stating age, experience and salary required, to Box 4297, "The Builder."

EXPERIENCED MEASURING SURVEYOR, for large civil engineering contract in North Kent. Firm of Chartered Quantity Surveyors invite applications, stating age, experience and salary required, to Box 4298, "The Builder."

LONDON FIRM of Chartered Quantity Surveyors Requires a QUANTITY SURVEYOR, resident in Hertfordshire, for varied contracts in that county. —Please write, stating age, experience and salary required to Box 4299, "The Builder."

SITE QUANTITY SURVEYOR Required by London Chartered Quantity Surveyor for large contract at Peterborough. Professionally-trained assistant 6 to 7 years experience. Able to work on own initiative. —Write, stating age and salary required, Box 4319, "The Builder."

QUANTITY SURVEYOR'S ASSISTANT Required, mainly for final account work. East Anglia. Five-day week, pension scheme. Please write, giving age, experience and salary required.—Box 4290, "The Builder."

SURVEYORS

BUILDERS' ESTIMATING SURVEYOR Required near Reading. Experienced in dealing with estimates from enquiry to final account. Must be capable of organising and supervising his own jobs and working on his own initiative.—Reply, giving full particulars of experience, references, age and salary required, Box 940, "The Builder."

SURVEYOR, with experience of heating, ventilating and plumbing, Required by Westminster Quantity Surveyors to deal with estimating, site measuring and final accounts. Five-day week. Luncheon vouchers.—Qualifications and experience and salary required, to Box 912, "The Builder."

MEASURING SURVEYOR Required by Quantity Surveyors', Westminster, for work in the London area. Salary according to qualifications and experience and reviewed regularly. Luncheon vouchers, pension scheme.—Apply, stating age and experience, to Box 936, "The Builder."

MEASURING SURVEYOR Required by London Chartered Quantity Surveyors for permanent staff. —Write stating age, experience and salary required, to Box 937, "The Builder."

MEASURING SURVEYOR/TAKER-OFF for London Quantity Surveyors' office. Salary according to experience and ability with emphasis on the latter. —Please write stating full particulars of experience, age and salary required, to Box 948, "The Builder."

TERSONS LIMITED

require

A SENIOR

and

ASSISTANT SURVEYOR

for contracts in the London area.

With a view to permanency the successful applicants will be invited to join the Company's pension scheme after a satisfactory trial period.

Applications are invited from First Class men who are willing to work in a team. Every encouragement will be given for maximum effort.

Please write giving full details of career and salary, quoting reference LK.

All letters will be treated in the strictest confidence.

The Secretary,
Tersons Limited,
Dollis Park,
London, N.3.

CIVIL ENGINEERING — BUILDING

DOUGLAS

With the continued expansion of the Company's activities throughout Great Britain vacancies exist at Headquarters in Birmingham and in various parts of the Country either on Contracts or at Regional Branch Offices for Senior and Junior Staff in various categories. The Company has an impressive record of growth and achievement in the construction field. The wide range of operations in different spheres of Civil Engineering and Building Construction affords excellent opportunities to applicants with the necessary technical knowledge, experience and enthusiasm.

Vacancies at present exist for the following :—

SUPERVISING ENGINEERS

capable of controlling groups of Contracts from Headquarters or Area Offices. Adequate technical training and experience with a good record in controlling Contracts as Agents.

AGENTS

with broad experience for major and medium sized contracts in all types of Civil Engineering and Building. Capable of handling all aspects of Contract Management.

SENIOR CIVIL ENGINEERS

as Sub-Agents, Section Engineers, for planning, setting-out control, site engineering and administrative duties. Degree in Civil Engineering or equivalent with practical experience required.

ASSISTANT & JUNIOR CIVIL ENGINEERS

with practical experience of setting out, measurement, and site records.

QUANTITY SURVEYORS

with previous experience with contractors on Civil Engineering and/or Building Work, Initiative, commercial acumen and ability to control accounts from commencement to final agreement.

SENIOR ASSISTANT QUANTITY SURVEYORS

to assist in the settlement of accounts for large Civil Engineering and Building Contracts.

ASSISTANT QUANTITY SURVEYOR

Candidates must provide proof of training as Surveyors and have analytical minds with requisite experience.

SENIOR ESTIMATORS

for Civil Engineering and/or Building Works. Capable of working on own initiative. Experience in pre-planning and previous control of works in the field an advantage.

ASSISTANT ESTIMATORS

of at least H.N.C. standard desirous of obtaining further training and experience.

PLANNING/ESTIMATING ENGINEER

Civil Engineer with wide technical and practical experience of construction to work in liaison with Head of Estimating Department in preparation of tender programmes, design of temporary works in connection therewith.

ESTABLISHMENT/PERSONNEL OFFICER

to administer Personnel Selection, Staff Training and Welfare Schemes and supervise conditions of employment. Wide experience of industrial management and/or personnel qualification necessary. Experience of Building and Civil Engineering Industry an advantage for this interesting and important post.

ORGANISATION & METHODS OFFICER

to be responsible to Management for control of procedure and adherence to company's system at Headquarters, Regional Offices and on Sites. To promote and maintain up-to-date methods and system in all aspects of Group activities. Experience of accountancy control in a wide and varied field essential.

All the above appointments carry excellent prospects. Pension and Life Assurance Schemes in operation. Car provided where appropriate. Remuneration according to experience and ability.

Apply in writing stating age, position applied for, qualifications and experience, to:—

Mr. S. J. Pedlar, M.A., Robert M. Douglas (Contractors) Ltd., George Road, Birmingham 23.

Area Headquarters :

LONDON · SWANSEA · STOCKTON-ON-TEES · LIVERPOOL · GLASGOW

BUNTING ESTATES LIMITED

require Office Manager Accountant, Surveyors, Supervisor, Buyer for:—

LONDON OFFICE

Surveyor

Must be fully qualified in taking off, preparing material schedules, site measurement, pricing and agreeing labour only sub-contractors.

Supervisor

Must be fully conversant with all types of housing and flat construction, roads and sewers. Capable of controlling site organisation including labour only sub-contractors.

SOUTHERN AREA OFFICE, BEXHILL

Surveyor

Qualifications as above.

Buyer

Must be thoroughly conversant with present market in all trades, surveyor trained an advantage but not essential.

NORTH WALES AREA OFFICE, LLANDUDNO

Office Manager/Accountant

Must be capable of keeping complete set of books to balance sheet, financial and statistical costings and forward budgeting.

Surveyor

Qualifications as above.

The above positions afford excellent opportunities for the right men in a rapidly expanding organisation. Reply in writing giving full details of past experience and salary required to

71-73, Acre Lane, Brixton, London, S.W.2.

BUILDERS' SURVEYOR Required for medium-size Builder's office West London. All-round man for control of Contracts, Preparation Accounts, etc. Please state age, experience, etc.— Box 3975, "The Builder."

MEASURING SURVEYOR/TAKER-OFF Required by Chartered Quantity Surveyors near Victoria Station for interesting and varied contracts in the Greater London area. Permanent appointment. Superannuation scheme, luncheon vouchers. Car owner an advantage. Good salary and prospects.—Write full particulars to Box 3979, "The Builder."

SENIOR and Junior SITE MEASURING SURVEYORS Required.—Reply, stating age, experience and salary required, to LAY & PARTNERS, 71 Wimpole-street, London, W.1.

PLASTERING CONTRACTORS in S.W. London Require experienced SURVEYOR. Permanent, pensionable position for suitable applicant.—Write stating age, experience and salary required, to Box 3712, "The Builder."

SURVEYOR Required for Premises Department of City Insurance Company. Age 23-26. Interesting and varied duties involving alterations, additions and maintenance of office properties throughout British Isles. Non-contributory pension scheme. Staff restaurant. Five-day week.—Full particulars experience, age and salary required, to Box 3909, "The Builder."

PLUMBING SURVEYOR Required by London firm of plumbing contractors. Applicant must be capable of preparing final accounts for contracts of all sizes. Non-contributory pension scheme in operation.—Please write, giving details of age and experience, to Box 4173, "The Builder."

BUILDING SURVEYOR Required, capable of preparing Surveys of sites and buildings and preparing Schedule of Conditions together with Specification of Repair Works. Sound knowledge of building construction essential.—Applications stating qualifications, experience and age, to R. C. SITEEL, A.R.I.B.A., Chief Architect, C.W.S., Ltd., 99 Leman-street, London, E.1.

THOMAS LOVE & SONS Ltd. have vacancies in their Birmingham office for PLANNING SURVEYORS with experience in all aspects of administration including Planning, Programming and Buying for Contracts. Applicants should have had previous experience and should apply, in the first place, in writing, to Curzon-street, Burton-on-Trent, stating age, qualifications and salary required.

YOUNG SURVEYOR (age 22/23) Required for Site Measuring, knowledge of London County Council schedule contract an advantage. Car driver. East London/Essex area.—Apply stating age, experience and salary required, to Box 4104, "The Builder."

ASHBY & HORNER LTD.

require

ESTIMATING SURVEYOR

for pricing Bills of Quantities and taking off quantities from specifications and drawings. Salary commensurate with qualifications and experience. Pension Scheme.

Applications giving details of age and experience should be addressed to:

The Secretary,
Ashby & Horner Ltd.,
69 Bishopsgate, London, E.C.2

SURVEYOR Required experienced in Taking-off and Measuring Reinforced Concrete. Permanent and pensionable position.—Write stating full experience, age and salary required, to Box 900, "The Builder."

SURVEYOR Required for medium-size building contractor engaged mainly on high-class work. Applicants should be capable of dealing with site bonus scheme, interim valuations and final accounts of contracts up to £150,000, and of the preparation of small schemes and taking-off quantities from drawings. The position is permanent and pensionable.—Apply, in writing, stating salary required, to COULSON & SON, Ltd., 37 St. Andrew's-street, Cambridge.

ESTIMATING SURVEYOR Required. Person must be capable of dealing with an extensive maintenance repairs programme and the preparation of bills of quantities for new building developments. Applications giving full details of age, experience and qualifications are to be sent to the Personnel Officer, BIRMINGHAM CO-OPERATIVE SOCIETY Ltd., Castle-street, (off High-street), Birmingham 4.

ASSISTANT ESTIMATOR/SURVEYOR Required for Uxbridge office of General Contractors and Private Developers.—PURSER & CO. (HILLINGDON), Ltd., Salisbury-road, Uxbridge.

ASSISTANT ESTIMATING SURVEYOR Required by Building Contractors, S.E. London district. Experience of commercial adaptations and alterations from enquiry to Final Account essential.—Write stating age, experience and salary required, Box 4084, "The Builder."

SURVEYORS

required by large expanding company of Private Estate Developers. Only keen young men need apply. Good salary and excellent prospects for right applicant.

Box No. 953, "The Builder"

EXPERIENCED SURVEYOR

REQUIRED

Applicants must have thorough knowledge of Surveying from commencement of contract to final settlement, on varied types of contracts up to £150,000.

Progressive appointment. Staff Bonus and Pension schemes in operation.

Apply in writing giving details of experience and salary required to The Manager, **Walter Lilly & Co. Ltd., Westminster, S.W.1.**

HOLLOWAY BROTHERS (LONDON) LIMITED

invite applications for the post of

SENIOR MEASURING SURVEYOR

HOLLOWAYS

Candidates should be experienced in taking off, site measuring preparation of certificate valuations and final accounts and be capable of estimating under supervision.

A.I.O.B. or equivalent qualification is desirable, age approximately 30/40 The Company operates its own Pension Scheme and offers other benefits.

Write giving full details and stating salary required to

THE SECRETARY,
157 Millbank, London, S.W.1.

SENIOR BUILDING BONUS SURVEYOR

required by a leading Building and Civil Engineering Contractor in London. Applicants should have experience of incentive payment schemes and possess a thorough knowledge of work measurement and target setting. The ability to train and supervise staff is essential. The successful applicant will be responsible for the supervision and operation of the Company's incentive bonus schemes on all building sites.

Contributory Pension Scheme and other advantages available.

Applications in confidence giving details of age, past experience, present position and salary, should be addressed to

The Secretary, Box G 5047 c/o Whites, 72, Fleet Street, London, E.C.4.

EXPERIENCED BONUS SURVEYOR

Urgently required for large Contract in W.C.1 area. Good salary and permanency for the right man.

Box No. 4000, 'The Builder'

COST AND BONUS SURVEYOR

Required for London area building contracts. Must be fully conversant in measuring all trades.

Apply giving details of age, experience etc.

Box No. 4195, "The Builder"

CUBITTS APPOINTMENTS

— see pages 62 and 63

SENIOR AND ASSISTANT SURVEYOR

required by National firm of Building Contractors for work in the London area. The positions offered carry attractive salary and bonus arrangements, and, with a view to permanency, are pensionable after satisfactory probationary period. Please write in strict confidence giving fullest details, including age and present salary to

Box No. 4247 "The Builder"

LESLIE & Co. Ltd.

require

SENIOR BONUS SURVEYOR

for responsible position based at their Head Office. The applicant should be experienced in efficient bonusing and target setting. Write giving full particulars to The Secretary, **Leslie & Co. Ltd., Peel Street, Kensington, W.8.**

JUNIOR BUILDING SURVEYORS

required by Building Contractors.
Write for application form to
J. JARVIS & SONS LTD.
239 Vauxhall Bridge Rd., London S.W.1.

G. E. WALLIS & SONS, LIMITED

invite applications for

SURVEYOR

Contracts in the London Area

Applications in writing, giving full particulars of age, qualifications, experience and salary, to be addressed to:

The Secretary,
231, Strand, W.C.2.

ESPLEY & CO. LTD.
have vacancy for

BUILDING SURVEYOR

on Permanent Staff.
New House available
Write, stating age, experience and salary required, to Managing Director, High Street, Evesham.

SENIOR LAND SURVEYOR

A rapidly expanding firm of Estate Developers urgently require the services of a Senior Land Surveyor with a flair for imaginative HOUSING LAYOUTS.

Applicants for this progressive position must be fully experienced Land Surveyors with good administrative ability and able to prepare attractive Sketch Layouts for preliminary negotiations with Local Authorities.

The successful applicant must be prepared to carry out work in the Field if necessary and to prepare accurate Road and Sewer Calculations.

A Staff Pension Scheme is in operation. Transport will be provided and it is customary to pay an Annual Bonus.

COMMENCING SALARY—£900 P.A.

Apply with full details to:—
Chief Engineer and Surveyor,
Federated Homes Limited,
69-71, East Street,
Epsom, Surrey.

HOLLOWAY DEVELOPMENTS LIMITED

wish to appoint a

SENIOR BUILDING SURVEYOR

HOLLOWAYS

for liaison duties in connection with property developments throughout the U.K.

Ability to organise and progress the work of consultant teams at all stages is essential. Candidates should be about 30 years of age and preferably qualified in the Building Sub-Division of the R.I.C.S. A qualification in Building or Quantities will be an advantage.

Salary by arrangement. The Company operates a pension scheme and usual benefits are available.

Applications to:

The Secretary, 157 Millbank, London, S.W.1.

W. & C. FRENCH Ltd. urgently Require for Building contracts SENIOR BONUS SURVEYOR mainly for Taking-off duties, and BONUS SURVEYOR for Site Measuring work.—Apply in writing, stating age, experience and salary required, to Personnel Manager, 50 Epping New-road, Buckhurst Hill, Essex.

MEASURING SURVEYOR, fully competent, for detailed valuations up to and including final account. —Write, full details, age, experience and salary required, C. L. NYE, Ltd., Caxton Works, Cranborne-road, Potters Bar, Middlesex.

BUILDERS' SURVEYOR Required for medium-size Builder's office North Herts. Experience in dealing with Estimates from Enquiry to Final Accounts. Excellent prospects for keen man. Accommodation available if required.—Write stating age, experience and salary required to: A. H. BURR & CO., Ltd., 40 Queen-street, Hitchin. Replies will be treated in confidence.

BONUS SURVEYORS for contracts in Essex and Hampshire. Only experienced men need apply. Good salary, expenses, bonus, non-contributory pension scheme.—Write to GILBERT-ASH Ltd., 2 Stanhope-gate, W.1. Ref. RD/CBH.

SURVEYOR. ASSISTANT with experience in preparing Interim Valuations and Site Measurements on Civil Engineering works. Pension scheme in operation, progressive staff appointment.—Apply in writing, stating age, experience, previous employers and salary ruired, to J. L. EVE CONSTRUCTION CO., Ltd., 17 Hillside, Ridgway, Wimbledon, S.W.19.

SURVEYOR. Experience in preparing Interim Valuation and Site Measurements on all classes of Civil Engineering work. Knowledge of Estimating an advantage. Car provided. Pension scheme in operation. Progressive permanent staff appointment to suitable applicant.—Apply in writing stating age, experience, previous employers and salary required to J. L. EVE CONSTRUCTION CO., Ltd., 17 Hillside, Ridgway, Wimbledon, S.W.19.

ENGINEERING SURVEYOR to assist in Setting-out and measurements on site near Luton. Contract duration twelve months and permanency offered to suitable applicant. (Out allowance payable.).—Apply in writing stating age, experience, previous employers and salary required, to J. L. EVE CONSTRUCTION CO., Ltd., 17 Hillside, Ridgway, Wimbledon, S.W.19.

QUALIFIED BUILDING SURVEYOR Required to join staff of firm of Chartered Architects. Must have good experience of site organisation and supervision for all forms of building works. Salary £750-£1,100, dependent upon qualifications and experience. Own car essential.—Please reply, in writing, to LOCKE, SON & NEWCOMBE, Chartered Architects, 2 St. Paul's-road, Newton Abbot, Devon.

PAINTING CONTRACTORS Require SURVEYOR/SURVEYOR ESTIMATOR for London and Southern Counties. Applicants must be fully experienced to final account. State age, experience, qualifications and salary required; also car driver or owner. Good prospects for the right person.—Box 4285, "The Builder."

SURVEYORS

required by large expanding company of Private Estate Developers. Only keen young men need apply. Good salary and excellent prospects for right applicant. Apply:

Chief Surveyor,
McMANUS & CO. LTD.,
Orchard House,
Orchard Parade, Potters Bar,
Middlesex.

TROLLOPE & COLLS LIMITED

Invites applications for

Bonus Surveyors

fully experienced in the measurement and preparation of bonus and cost returns. Applications, giving full particulars of qualifications, experience and salary required, should be sent to:

The Assistant Secretary,
Trollope & Colls Limited,
One Noble Street, Gresham Street,
London, E.C.2

MEASURING SURVEYOR

required, experienced in measuring, works in progress, preparing interim certs and final a/c's for bdg. works up to £¼ million. Write full details and salary reqd. to The Manager, Cawood Wharton & Co. Ltd., 75, Crouch Hall Road, N.8.

MEASURING SURVEYOR Required by Chartered Quantity Surveyors near Holborn, to assist in preparing interim valuations and final accounts. Five-day week, luncheon vouchers; interesting contracts. Opportunity for promotion.—Write, giving details of age, experience, etc., to Box 4287, "The Builder."

EXPERIENCED SURVEYOR Required by well-known firm of Building and Civil Engineering Contractors. Applicants should have thorough knowledge of the industry. This position is progressive, pensionable and a top salary is offered for the right person. —Write, please, in first instance to Box 4323, "The Builder."

MESSRS. OSWALD E. PARRATT Require experienced MEASURING SURVEYORS for their Harlow office. Five-day week, pension scheme, housing accommodation may be available.—State age, experience and salary required, to Adelaide House, London Bridge, E.C.4.

C. & M. PLASTERERS, Ltd., Require keen young SURVEYOR. London area. Good prospects and remuneration for right man.—'Phone: NORth 6513.

COST & BONUS SURVEYORS Required for London area contracts. Must be able to measure all trades. Good salary.—Apply, giving details of age, experience, etc., to Chief Cost and Bonus Surveyor, BERNARD SUNLEY & SONS, Ltd., Maylands-avenue, Hemel Hemestead, Herts.

KEEN young SURVEYOR Required by medium-sized Builders for Measuring Sub-Contractors' and Final Accounts, with some Buying experience. Good prospects.—Apply Box 4248, "The Builder."

SURVEYOR/NEGOTIATOR (about 25 years) urgently Required by Mayfair, W.1, Property Company. Duties would involve purchase of property for development principally in South London. Excellent prospects.—Apply Ref S., Box 4251, "The Builder."

YOUNG MEASURING SURVEYOR Required for specialist contractor in London area. Some travelling necessary.—Apply, stating age, experience and salary required, to Box 4213, "The Builder."

MECHANICAL and/or ELECTRICAL MEASURING SURVEYOR Required in Quantity Surveyors' office in Berkshire. Practical knowledge of M. & E. services essential. Experience of measuring desirable but not essential.—Write, giving full particulars, to Box 4230, "The Builder."

MEASURING SURVEYOR urgently Required in Quantity Surveyors' Berkshire office. Good salary. —Write, full particulars, to Box 4229, "The Builder."

ASSISTANT SURVEYORS

ASSISTANT SURVEYOR, age 21/26, Required by London Building Contractor. Applicants should be capable of measuring and agreeing Sub-Contractors accounts, measuring Variation Orders, and preparing Valuations all under supervision.—Apply stating age, experience, and salary required, Box 3939, "The Builder."

ASSISTANT SURVEYOR (minimum Intermediate standard) for work in all branches of the profession Required by London Quantity Surveyors.—Reply, stating age, experience, salary required, Box 4163, "The Builder."

ASSISTANT MEASURING SURVEYOR. Interested in a career with a specialist building Company. Must be willing to travel, driving licence an asset. —Please write, in confidence, stating previous experience and qualifications, if any, to Box 4082, "The Builder."

ASSISTANT SURVEYORS

required of Higher National Certificate standard, and with experience of dealing with measurement of variations and preparation of final accounts for Westminster Contractors. The appointments offer excellent opportunities in an expanding Company. Bonus and Pension schemes. Write giving details of age, experience and salary, to—

Box No. 4057, 'The Builder'

ASSISTANT SURVEYOR Required for varied and interesting work including Taking-off, Site Measuring, Bonusing, Planning and Contract organisation.—Apply to Mr. Bateup, R. D. HOPE & CO., Ltd., 15 Selsdon-road, South Croydon. CRO 9262.

ASSISTANT BUILDING SURVEYOR Required in progressive West End Architects' office to assist a group of Building Surveyors on estate layout, conversions and industrial work. Experience in land surveying an advantage. Ample opportunity for using initiative and for gaining experience. Salary according to age and experience. Appointments by arrangement.—J. M. AUSTIN-SMITH & PARTNERS, 29 Sackville-street, London, W.1. REGent 6183.

REQUIRED, a SURVEYOR'S ASSISTANT. Must be of Intermediate standard of R.I.C.S., in Building Surveying Section and capable of writing Specifications, preparing Schedules of Dilapidations and Condition, be a neat draughtsman and have a good knowledge of Building Construction. Interesting and varied work offered. Salary according to experience.—Write to ELLIOTT, SON & BOYTON, at 86/7 Wimpole-street, London, W.1.

ASSISTANT SURVEYOR, Building Contractor's office, Raynes Park. Good prospects. Staff pension scheme.—Full particulars of experience and salary, Box 4256, "The Builder."

IND COOPE (EAST ANGLIA) Ltd. Require an ASSISTANT BUILDING SURVEYOR for employment in the Romford area. Applicants must have a thorough knowledge of all trades and be capable of preparing specifications for exterior painting, all classes of interior decorating, maintenance repairs generally, supervising work in progress and checking final accounts. Applicants must hold a current driving licence. Salary according to age and experience. The Company operates a Pensions scheme with substantial widows' benefits in the event of death before or after retirement.—Applications in writing, please, to the Company Architect, IND COOPE (EAST ANGLIA) Ltd., High-street, Romford, Essex.

ASSISTANT SURVEYOR

about 25, for expanding building department of substantial contractor. Excellent opportunity to gain experience and grow with the department. Kingston, Surrey, area. Salary about £750, according to experience. Please write full details and state why you are interested to:

Box No. 4291, "The Builder"

LAND SURVEYORS ASSISTANT

required by Estate Developer. Good opportunity for young man of integrity who is keen and progressive. Housing is available if required. Please apply in writing, stating age and experience to:

Box No. 4300, "The Builder"

ASSISTANT BUILDING SURVEYORS

who have a good background in the Industry, together with the energy and determination to merit promotion to senior positions, are offered excellent opportunities to extend their experience by a wide variety of interesting work on projects in Central and South London. Good salaries, regularly reviewed, together with bonus, superannuation benefits and the support of a first class team will be offered to ambitious applicants possessing initiative. Apply with full details of age, technical education and past experience, quoting reference KC, to

The Secretary,
Tersons Ltd.,
Dollis Park, Finchley, London, N.3.

JUNIORS

YOUNG MAN Required in Chartered Quantity Surveyors' office in London for junior Working-up. Applicants should hold the G.C.E. for not less than five subjects at Ordinary level.—Apply, Box 4166, "The Builder."

JUNIOR Required in busy London Builder's office to assist in Surveying and Estimating for all types of work. Some experience desirable or good technical school background. Five-day week and luncheon vouchers.—Write with full details to Secretary, KILLBY & GAYFORD Ltd., 87 Worship-street, London, E.C.2.

PAINTING CONTRACTORS Require JUNIOR with some experience of squaring and abstracting. The position will lead to TRAINEE ESTIMATOR. Generous commencing salary commensurate with ability.—PERROTT GRENVILLE, Ltd., 58 Kensal-road, W.10.

YOUNG MAN Required by Chartered Quantity Surveyor's in Gray's Inn to take the post of Junior. A good opportunity to learn the work of the profession.—Please write for an interview to Box 4322, "The Builder."

CHARTERED QUANTITY SURVEYORS, London, W.C.2, offer position to teenage boy to train for professional status. Son of building trade craftsman preferred.—Box 4265, "The Builder."

YOUNG MAN Required for Building and Maintenance office of Multiple firm in Acton, to keep records and general office work. Age 17-20.—Write stating wage and experience to F. MEYERS, Ltd., Gipsy Corner, Western-avenue, Acton, W.3.

YOUNG MAN 16/20 wanted, Contractor's offices, S.W.1 area. Some experience in Taking-off details from Architect's plans. Good prospects.—Write Box 4263, "The Builder."

A YOUNG MAN Required to assist Estimator in Wholesale Builders' Merchants, near Victoria-street, S.W.1. Some knowledge of the Building Industry preferred. Suitable applicant would be trained. Five-day week. Good working conditions. Salary by arrangement.—Apply in writing to Box 4193, "The Builder."

JUNIOR Required, Chartered Architect's office. Time off for general subjects before full-time school or for part-time school training. To assist in office generally.—C. GURNEY BURGESS & ASSCS., Dudley House, 36/38 Southampton-street, Strand, London, W.C.2. Covent Garden 2821.

TAKERS OFF

MANCHESTER Chartered Quantity Surveyor Requires WORKING-UP and TAKING-OFF staff. One day per week off for studying if required. Good salary and prospects. Pension scheme.—Apply stating age, experience and salary required, to Box 3663, "The Builder."

TAKER-OFF, Final standard, Required by Quantity Surveyors, Westminster. Good salary, luncheon vouchers. No Saturdays.—Apply, Box 929, "The Builder."

SENIOR TAKER-OFF for responsible position in busy Quantity Surveyors' office, Westminster. Salary commensurate with responsibility. Luncheon vouchers, pension scheme.—Brief details to Box 931, "The Builder."

DUE TO EXPANSION, firm of Quantity Surveyors, Westminster, have vacancies for TAKERS-OFF of Intermediate to Final Standard. Excellent prospects with good starting salary reviewed regularly, two weeks' holiday rising to three weeks after three years with the firm. Pension scheme, luncheon vouchers.—Apply, stating age and experience, to Box 944, "The Builder."

JUNIOR TAKERS-OFF Required by West End Chartered Quantity Surveyors for permanent staff.—Write, stating age, experience and salary required, to Box 908, "The Builder."

TAKER-OFF Required by not very well-known firm of Chartered Quantity Surveyors, London, W.1. Salary scale commensurate with ability to handle boxwood (or even ivory) scale.—Apply in writing giving age, experience and salary required, Box 4043, "The Builder."

AUSTRALIA. Vacancies for TAKERS-OFF, see advert. under heading "Overseas Appointments."

TAKERS-OFF Required by Chartered Quantity Surveyors for London and Sheffield offices. Five-day week, pension scheme, salary according to experience.—Apply to MERCER & MILLER, 10 Manchester-square, W.1. HUN 0497.

CHARTERED QUANTITY SURVEYORS Require TAKER-OFF, A.R.I.C.S., for medium-size varied London practice. High salary scales paid to suitable applicants with security and prospects. Only Takers-off willing to take responsibility and work hard and efficiently for a salary above average need apply.—Please write, Box 3942, "The Builder."

TAKER-OFF, A.R.I.C.S., Required W.C.2. Permanent position in expanding practice; good comprehensive experience essential. Salary £1,500 upwards.—Please write, stating age, experience and salary required, to Box 3943, "The Builder."

SENIOR and Junior TAKERS-OFF Required for appointments at Slough office.—Reply, stating age, experience and salary required, to LAY & PARTNERS, 71 Wimpole-street, London, W.1.

TAKERS-OFF Required by London Quantity Surveyors. Salary scale £900-£1,500 per annum, according to ability, plus overtime.—Please write giving details of experience, age, etc., to Box 4135, "The Builder."

SENIOR TAKER-OFF Required in Manchester office of C. WILLIAM O'L. MARKHAM & PARTNERS. Salary £1,300-£1,500 according to experience. Five-day week, pension scheme and luncheon vouchers.—Apply stating age and experience to 18 Lloyd-street, Manchester 2.

SENIOR TAKER-OFF (A.R.I.C.S. preferred) Required in London office by busy firm of Chartered Quantity Surveyors. Commencing salary £1,250-£1,500 according to qualifications and experience, overtime available. Non-contributory pension and insurance scheme, and luncheon vouchers. Option of interesting work abroad.—Write Box 4136, "The Builder."

TAKERS-OFF Required, aged 23 to 30, qualified or up to Final standard R.I.C.S., for medium-sized London Quantity Surveyors' office with cheerful working conditions. Salaries commensurate with ability, luncheon vouchers and staff pension scheme.—Apply Box 4137, "The Builder."

BIRMINGHAM. JUNIOR TAKER-OFF Required in professional office. Excellent scope for advancement.—Reply stating age, experience and salary required, to Box 4190, "The Builder."

WEST END Chartered Quantity Surveyor Requires TAKER-OFF. Salary in the region of £1,250.—Reply in writing stating age, experience and salary required to Box 4191, "The Builder."

LESLIE G. DIGHT, F.R.I.C.S., 35 Portland-place, W.1, Requires TAKER-OFF. Salary £900 to £1,200, depending on experience.—Reply in writing stating experience, age and salary required.

TAKER-OFF Required by Chartered Quantity Surveyors. City area. Salary up to £1,200 per annum according to age and experience.—Box 4201, "The Builder."

EXPERIENCED TAKER-OFF Required in the West End office of Quantity Surveyors.—Write, stating age, experience and salary required, to Box 4199, "The Builder."

MANCHESTER. London firm of Quantity Surveyors Require Senior TAKER-OFF. Salary £1,250-£1,350. Superannuation scheme after trial period.—Box 998, "The Builder."

TAKERS-OFF (Senior and Junior) Required by London Chartered Quantity Surveyors—West Central district. Must be prepared to learn Northern method if not already used to it.—Write full details of experience, age, education and salary expected.—Box 4210, "The Builder."

SENIOR and Junior TAKERS-OFF and experienced MEASURING SURVEYOR Required in City Chartered Quantity Surveyor's office.—Write stating age and salary required, Box 4235, "The Builder."

SENIOR TAKER-OFF, A.R.I.C.S. or equivalent, urgently Required by BOND, FISHER & PARTNERS for their Birmingham office. Good salary for keen man able to work on own initiative.—Write: 50 Calthorpe-road, Birmingham 15, or 'phone Edgbaston 3624.

CHIEF TAKER-OFF Required in Quantity Surveyor's office in London with possibility of Partnership after a mutually satisfactory trial period. Must be either an Associate or Fellow of the R.I.C.S. (Section 3Q) with at least 5 years' senior Taking-off experience of a high standard and to have either a Grammar or Public School education and good professional training. Must also be a hard worker and capable of taking responsibility. Age between 28 and 35 years.—Full particulars in writing of age, education, training, experience and salary required, to Box 4252, "The Builder."

IS there a Junior TAKER-OFF who would be interested in filling permanent position in London office of progressive Quantity Surveyor's with a varied practice where there are exceptional prospects for anyone who is tired of monotony and wishes to obtain all-round experience in Taking-off, Site Measuring, Valuations and Final Accounts leading to entire responsibility for complete contracts? Five-day week, luncheon vouchers, bonus scheme, three weeks' holiday after first year, optional overtime. In reply, please state age, qualifications and salary required.—Box 4219, "The Builder."

WOKING. Competent Junior TAKER-OFF Required by Chartered Quantity Surveyor. Good salary and overtime.—Please write to Box 4264, "The Builder."

JUNIOR TAKER-OFF and MEASURING SURVEYOR Required.—Write only, KNIGHT & BENWELL, Chartered Quantity Surveyors, 12 Queen-square, Brighton, 1.

JUNIOR and **SENIOR TAKER-OFF** Required by Chartered Quantity Surveyor, East Anglia. Five-day week, pension scheme. Please write giving age, experience and salary required.—Box 4288, "The Builder."

CHARTERED QUANTITY SURVEYORS Require SENIOR ASSISTANT in their London office. Salary up to £1,500 per annum according to age and experience. Luncheon vouchers and pension scheme.—Applicants are requested to write to Box 4302, "The Builder."

LONDON CHARTERED QUANTITY SURVEYOR Requires Qualified ASSISTANT resident in Exeter for the remeasurement and settlement of variations. State age, experience and salary required.—Box 4303, "The Builder."

JUNIOR TAKER-OFF Required by London firm of Chartered Quantity Surveyors. Salary £750-£1,000 for five-day week. Luncheon vouchers, overtime payments and pension scheme.—Please apply, stating age and experience, to Box 4304, "The Builder."

CHARTERED QUANTITY SURVEYORS (S.W.1) owing to further expansion on long-term varied and interesting projects Require various grades of TAKERS-OFF for all duties (taking-off, site measuring, cost planning, estimating and pricing) and one IMPROVER (intermediate standard subject to transfer to junior taking-off). Permanent appointments. Superannuation scheme. Luncheon vouchers. Salaries according to experience with six monthly reviews.—Write, full particulars, to Box 4312, "The Builder."

TAKERS-OFF Required, senior and junior. Five-day week and pension scheme.—Apply, giving age, experience and salary required, to OSWALD E. PARRATT AND PARTNERS, Adelaide House, London Bridge, E.C.4.

TAKERS-OFF Required by Chartered Quantity Surveyors for Essex office. Five-day week, pension scheme.—Apply, giving age, experience, salary required, to Box 4308, "The Builder."

WORKERS UP

EXPANDING FIRM OF QUANTITY SURVEYORS, Westminster, have vacancies for WORKERS-UP, with four years' experience or longer. Luncheon vouchers, pension scheme.—Apply to Box 938, "The Builder."

WORKERS-UP Required, Senior and Junior, for office of Chartered Quantity Surveyors in the Holborn area.—Box 950, "The Builder."

SENIOR WORKER-UP Required for Holborn Chartered Quantity Surveyors. Security for right applicant willing to make working-up his career; good salary in return for hard work and competence.—Please write, stating age, experience and salary required, to Box 3944, "The Builder."

EXPERIENCED WORKERS-UP Required by Chartered Quantity Surveyors in West Central area. Top salaries, first-class working conditions, luncheon vouchers and staff pension scheme in operation.—Apply for interview by telephone, CHAncery 5841, ref. S.D.M.

FREDERICK S. SNOW & PARTNERS

CONSULTING ENGINEERS

have vacancies on their permanent staff

for

WORKERS-UP

in their expanding Quantity Surveyors Department. This department, which is approved by the R.I.C.S. and I.Q.S., is in a new building at 71, Southwark Street, London, S.E.1.

Five-day week, Luncheon Vouchers, Superannuation.

Please reply in writing stating age, experience, qualifications and salary required, to:

E. W. Ashford, A.R.I.C.S., F.I.Q.S.,
'Ross House',
144, Southwark Street,
London, S.E.1

WORKER-UP Required mainly for checking abstracts and bills. Progress towards taking-off after few months.—Apply in writing to BASIL A. COHEN, F.R.I.C.S., 60 Berners-street, London, W.1.

EXPERIENCED WORKER-UP Required for expanding and progressive Quantity Surveyor's office in South Kensington. Salary £650-£800, according to experience. Luncheon vouchers, 5-day week, Sliding holiday scale.—Box 3753, "The Builder."

WORKERS-UP, Senior and Junior, Required by West End Chartered Quantity Surveyors. Five-day week, salary according to experience.—Apply to MERCER & MILLER, 10 Manchester-square, W.1. HUN 0497.

WORKER-UP, able to undertake some site measuring, Required by a firm of Quantity Surveyors for London office.—Apply stating age and salary required.—Box 973, "The Builder."

WORKER-UP Required by Chartered Quantity Surveyors in Gray's Inn. Should be willing to remain in working-up permanently.—Please reply, stating age, experience and salary required, to Box 4320, "The Builder."

LONDON FIRM of Chartered Quantity Surveyors Require WORKER-UP. Five-day week. Overtime available.—Please apply, giving age, experience and salary required, to Box 4321, "The Builder."

SENIOR WORKER-UP Required for our London office. Opportunity for right applicant.—Full details to CLARENCE E. SMART & PARTNERS, 42 Theobalds-road, W.C.1.

WORKER-UP Required by Chartered Quantity Surveyor, East Anglia. Five-day week, pension scheme. Please write giving age, experience and salary required.—Box 4289, "The Builder."

WORKER-UP Required by firm of Chartered Quantity Surveyors for long-term contract at Newport, Mon. Rented accommodation available.—Please apply stating age, experience and salary required, to Box 4305, "The Builder."

FIRM of Chartered Quantity Surveyors have vacancy in their London office for permanent position as WORKER-UP. Luncheon vouchers. Pension scheme. Overtime paid.—Please write stating age and experience to Box 4306, "The Builder."

WORKER-UP, Vacancy in Swansea/Llanelly site offices of firm of Chartered Quantity Surveyors.—Please apply stating age, experience and salary required, to Box 4307, "The Builder."

WORKER-UP urgently Required in City Chartered Quantity Surveyor's office to assist in Site Measuring and to commence Taking-off. Progressive salary and luncheon vouchers.—Box 4286, "The Builder."

IS there an experienced WORKER-UP who would be interested in filling permanent position in London office of progressive Quantity Surveyors with a varied practice where there are exceptional opportunities for anyone who is tired of monotony and wishes to obtain advancement and the chance to undertake other duties if required. Five-day week, luncheon vouchers, bonus scheme, three weeks' holiday after first year, optional overtime. In reply please state age, qualifications and salary required.—Box 4220, "The Builder."

SENIOR WORKER-UP Required by West End Chartered Quantity Surveyors. Five-day week. Luncheon vouchers. Salary according to experience.—Box 4246, "The Builder."

WORKER-UP, having at least 4 years' experience, Required by London Chartered Quantity Surveyors. Varied work. Five-day week, overtime paid.—Apply in hand-writing giving age and experience.—Box 4211, "The Builder."

EXPERIENCED WORKER-UP Required in the West End office of Quantity Surveyors.—Write, stating age, experience and salary required, to Box 4198, "The Builder."

ENGINEERS

SITE ENGINEERS Required on important new hospital contract at Swindon, and on other contracts, with experience in Setting-out of R.C. work and progress and planning.—Applications to J. GERRARD & SONS, Shakespeare House, Newport-road, Hayes, Middlesex, with full particulars, age, salary required.

CIVIL ENGINEER Required, preferably with University Degree, by Building and Civil Engineering Contractor in Manchester area, on various Contracts. Duties in the first instance will be on sites of Contract between £100,000 and £500,000. Unique opportunity for a competent applicant to build up a Civil Engineering Department in a progressive and expanding Company.—State full details of qualifications, experience and salary required, to Box 4243, "The Builder."

SENIOR ENGINEER

A Senior Engineer is required in the **DEVELOPMENT SECTION**—of a Building Company in the West End of London.

Applicants should have had experience in the DESIGN LAYOUT—and DEVELOPMENT of HOUSING and FLAT SCHEMES and should be able to negotiate with local and other authorities.

The position is permanent and progressive and a superannuation scheme is available.

Commencing salary approximately £1,200 *p.a. according to experience, plus bonus and car allowance.*

Also vacancies for INTERMEDIATE and JUNIOR ASSISTANTS.

Apply—Box 4129 'The Builder'

STRUCTURAL ENGINEERING ASSISTANT

required with experience in the design and detailing of steel structures and having some knowledge of reinforced concrete work—minimum qualifications Grad.I. Struct.E., or equivalent. The post is pensionable, subject to medical examination. Five-day week in operation. Applications, giving age, details of previous experience, qualifications and salary required to G. S. Hay, F.R.I.B.A., Chief Architect, **Co-operative Wholesale Society Ltd., 1 Balloon Street, Manchester, 4.**

Technical Planning Assistant

wanted for Building and Civil Engineering Contractors.

Duties will involve taking off, requisitioning and progressing of bulk materials and sub-contractors.

Applicants should be fully conversant with building construction and should be experienced in planning in order to assist in formulating realistic and workable contract programmes.

The position provides good prospects for the right man in a new and expanding Company. Bonus and Pension schemes in operation.

Write stating details of age, education, qualifications and experience to :—

General Manager,
Lowton Civil Engineering Ltd.,
Lowton St. Mary's,
Nr. Warrington, Lancs.

ESTIMATORS

ASSISTANT ESTIMATOR Required. Permanent and progressive position in our Crayford office. Applicants should have sound knowledge of building-up prices and would work directly under the supervision of the Chief Estimator.—Apply, in writing, stating age, experience, training and salary required, to GALBRAITH BROS. Ltd., Crayford Bridge, Crayford, Kent.

JUNIOR ESTIMATING SURVEYOR Required by well-known firm of Painting Contractors. Capable of preparing accurate specifications and estimates for small works. Generous commencing salary.—Apply PERROTT GRENVILLE Ltd., 58 Kensal-road, W.10.

ESTIMATOR/SURVEYOR. Opening occurs in Beds/Herts border area for young man fully experienced and accustomed to hard work, long hours and responsibility, to take active interest in Estimating Service. Replies, giving full confidential particulars, and present salary will be acknowledged.—Box 3946, "The Builder."

ASSISTANT ESTIMATOR/SURVEYOR, aged 25-30 for Contracts Department. Medium-size builders, City area. Progressive position and salary. Pension scheme, luncheon vouchers.—Write stating age, full details of experience, and salary required to Box 3917, "The Builder."

ESTIMATOR/SURVEYOR Required by long-established North Somerset Builders for contracts up to £150,000. Apply stating experience, age and salary required.—Box 3958, "The Builder."

ASSISTANT ESTIMATOR Required for medium-sized Builders S.E. London. Capable of preparing estimates for contracts up to £25,000 without supervision. Permanent appointment. Pension scheme.—State age, experience, salary required, Box 3978, "The Builder."

JOINERY ESTIMATOR Required by subsidiary company of Building group. Experienced in pricing B. of Q. Surrey/Middlesex area. Modern expanding works.—Write, stating full details, to Box 4100, "The Builder."

ESTIMATOR/SURVEYOR Required for small/medium Building company. Applicants must be experienced in pricing contracts up to £100,000 and also in preparing specifications and estimates for alterations and high-class maintenance work. Permanent and progressive position, with Superannuation scheme.—Apply, in writing, to A. SAUNDERS & SON (BRENTWOOD), Ltd., Western-road, Brentwood, Essex.

YOUNG ESTIMATOR/SURVEYOR, aged 25-30, Required. West London. Progressive position and salary. Five-day week. Pension scheme.—Write Box 4080, "The Builder."

ESTIMATOR for small works department Required by Builder in Croydon area. Applicant to have initiative and able to prepare own specifications. Progressive post for suitable applicant.—Box 4066, "The Builder."

ASSISTANT ESTIMATOR/SURVEYOR Required for small works section.—Apply to Mr. Bateup, R. D. HOPE & CO., Ltd., 15 Selsdon-road, South Croydon. CRO 9262.

ESTIMATOR/SURVEYOR

Required for employment in CYPRUS with well established local Building and Civil Engineering Contractor extensively engaged on Contracts for War Department and Air Ministry. Applicant should be about 35/40 years of age and must be experienced in estimating for large scale Contracts, site measurement and the preparation of monthly valuations and final accounts. Salary £2,000/£2,500. Reply giving age and full details of experience to—

Box No. 4094, "The Builder"

WRAIGHT LIMITED

Member of the R.D. Hope, Gibson, Kimber Group of Builders, require at their works

23 LONDON ROAD, SITTINGBOURNE

Phone 2266/7/8

A JOINERY ESTIMATOR

for varied and interesting general building and contracting work. Excellent prospects to progress with this expanding group of companies.

CALVERLEY

Old Established
Building &
Civil Engineering
Contractors
require a

SENIOR ESTIMATOR

capable of tendering for contracts up to £500,000. A.I.O.B. or A.I.Q.S. an advantage.
A substantial salary
is offered and a Pension & Life Assurance Scheme is in operation. Car will be provided and assistance with housing if required.

Apply in confidence stating age, previous experience and where gained to

The Secretary,
George Calverley & Sons
(Contractors) **Ltd.,**
Evington Valley Road, Leicester.

ESTIMATOR/SURVEYOR

Required for Contracts Dept. of large Middlesex Building Company. Applicants should have good knowledge of site measuring, interim valuations, final accounts negotiations etc., placing of bills of quantities. Write stating age, experience, salary required to:

Chief Surveyor

McMANUS & CO. LTD.,
Orchard House,
Potters Bar, Middx.

ESTIMATOR Required by Building and Civil Engineering Contractors in the Newcastle-upon-Tyne area. Applicants should be fully experienced in pricing Contracts up to £250,000. Excellent salary and prospects for the right man. Pension scheme in operation.—Write giving full particulars of age, experience, etc., to 4326, "The Builder."

BUILDERS' ESTIMATOR. Harrow. Small works, maintenance, heating ; all trades as assistant.—Write age, experience, salary, Box 4277, "The Builder."

ESTIMATOR SURVEYOR Required by good-class small country builder. Weald of Kent.—Reply, in writing, stating age, experience, salary required, to Box 4274, "The Builder."

HOLLIDAY & GREENWOOD Ltd. Require ESTIMATOR/SURVEYOR for Contracts Department. Experience in large and medium-sized contracts, interim valuations, final accounts essential. Applicants should send particulars of career to date, present salary and availability, to Managing Director, HOLLIDAY & GREENWOOD Ltd., 11 Buckingham Palace-gardens, S.W.1.

SLOGGETTS (CONTRACTORS) LTD.

1. SENIOR ESTIMATOR

required. Experienced in pricing Bills of Quantity up to £500,000. Permanent position with opportunity to take over position of Chief Estimator/Surveyor.
Good salary & conditions. Applicant should be between 30 and 40 years of age.

2. ASSISTANT SURVEYOR

required. Experienced in measuring & agreeing final accounts essential. Willing to assist Estimator. Good prospects.

3. BUYER

required. Fully experienced in all phases of this department. Surveyor trained preferred but not absolutely essential.

Apply in writing to :
209, High Street, Hampton Hill, Middx.

SENIOR ESTIMATOR

required for B. and C.E. Works up to £500,000, must be fully experienced. Pension and Life Assurance Scheme. Apply, full details, age, experience, salary required (outer London area).

Box No. 4313, "The Builder"

SENIOR STOREFITTING ESTIMATOR Required. Permanent progressive position for a thoroughly experienced man. Five-day week. Profit sharing scheme in operation.—Apply in writing, stating age, experience and salary required, to Managing Director, HICKMAN Ltd., North Circular-road, N.W.2.

ESTIMATOR/SURVEYOR Required for small contracts, alterations, conversions and jobbing work. Applicants must be capable of dealing with all aspects from Enquiry to Final Account, and used to Taking-off. Current driving licence essential.—State age, experience and salary required, to BROMBY AND HOARE Ltd., 60 South-road, Poole, Dorset.

ESTIMATOR/SUPERVISOR Required for Plumbing Division, capable of running Contracts and Jobbing, Kingston district.—Apply Box 4222, "The Builder."

ESTIMATOR/SURVEYOR Required for Small Contracts Division in Kingston area. Must have sound knowledge of the Decorative Section.—Apply Box 4223, "The Builder."

SENIOR ESTIMATOR Required by Building Contractors whose head office is near Guildford. Applicants, who should be fully experienced, are invited to send full details of age, experience and qualifications in confidence, to Box 909, "The Builder."

ASSISTANT ESTIMATOR. A SURVEYOR in his early twenties is Required to assist Senior Estimator, by Building and Civil Engineering Contractors engaged in major works up to £250,000. Applicants should be L.I.O.B. or I.Q.S., Intermediate standard, and have experience of Taking-off and Surveying. The position, which is permanent and progressive, is at the head office of CHARLES R. PRICE, Kingsbury-road, London, N.W.9.—Write, giving full particulars, to above address.

ESTIMATOR Required. Used to conversions and repairs and minor works in general. Prepared to supervise works in Stepney and Hackney area.—Please ring TRA 7203, for appointment.

SENIOR ESTIMATOR for Herts./Middlesex border firm. Top grade men only for contracts. £10,000 to £500,000.—Write, giving full details age, experience, and salary required, to Box 4019, "The Builder."

ASSISTANT ESTIMATOR/SURVEYOR Required for medium-size Building Contractor on mainly high-class work. Applicants should have had some previous experience in a similar capacity, be able to take off quantities from drawings, and have a knowledge of the analysis of prices. Permanent pensionable appointment.—Apply, stating salary required, to COULSON & SON, Ltd., 37 St. Andrew's-street, Cambridge.

MANAGERS

OFFICE MANAGER Required for Building and Civil Engineering Contractors in Birmingham. Must be capable of taking full responsibility. Commencing salary £1,250. Permanent position for right man. All replies treated in strictest confidence.—Apply Box 4140, "The Builder."

We require the services of a

SPECIALIST

on reinforced concrete, able to institute on all sites and instruct others in all the best concrete techniques and practice. Please state age, experience, education and salary required.

Box No. 4249, "The Builder"

MANAGER

required for control of Maintenance Dept., of Building Co., in Middx. area. Ability in office administration, as well as technical knowledge essential. Good Salary, bonus, pension scheme and transport provided. Apply in writing stating experience, age and salary required.

Box No. 4120, "The Builder"

Contracts Manager

Contracts Manager required by London Building and Civil Engineering Contractors for contracts up to £500,000. Age 40-45. The position is permanent and pensionable, carries an attractive salary and bonus. Only those possessing drive and well versed in Contracts Management should apply. Write in strict confidence to Managing Director giving full details of previous experience to—

Box B 286 LPE 60/62 St. Martin's Lane, London, W.C.2.

TROLLOPE & COLLS LIMITED

require the services of

BUILDING MANAGERS AND SITE AGENTS

in London and/or the Midlands with experience on contracts involving the erection of new buildings and large reconstructions. Must be capable of supervising work and dealing with estimates and accounts. Apply with full particulars of age, experience and salary required to:—

The Assistant Secretary,
TROLLOPE & COLLS LIMITED
One Noble Street, Gresham Street,
London, E.C.2.

JOINERY WORKS MANAGER for Kingston, Surrey, area. Excellent opportunity for energetic man to build up substantial business. Experience in Estimating and in Production Control and Forward Planning necessary. Age 28/35. Salary depending on experience of applicant in the range £1,000-£1,250.—Reply in strictest confidence to Box 4134, "The Builder."

RESIDENT CONTRACTS MANAGERS and MEASURING SURVEYORS Required for the Cheshire, Nottinghamshire and Hull, Yorkshire areas. Permanent and progressive posts for suitable applicants possessing the required ability and initiative. Salary commensurate with experience and qualifications. Contributory superannuation scheme in operation.—Apply, in writing, giving full details, to SPOONERS (HULL), Ltd., Stoneferry-road, Hull, E. Yorks.

PLANT MANAGER Required by North West firm of B. & C.E. Contractors. Capable of taking charge of repair and maintenance shop and outside site plant organisation. This position will carry a good salary for the right person. Only experienced men need apply, in confidence, stating age and experience, Box 4077, "The Builder."

MANAGER (West London). Old-established family business, average 25 operatives, engaged in general maintenance and small contracts, and on threshold of further extension. Requires an experienced, practical man to take charge. Prospect of eventual directorship. Every encouragement to a man with progressive ideas on administration. This is a genuine opportunity for someone seeking to secure the future. Enquiries invited for interview. Please state approximate salary requirements.—Box 4078, "The Builder."

PLANT & TRANSPORT MANAGER experienced in control and maintenance of Builders' plant, stock, mechanical plant and transport. Applicant should have drive and determination to succeed. Post is permanent and pensionable.—Apply, in writing, stating experience, qualifications and salary required, to COURTNEY & FAIRBAIRN, Ltd., 377 Albany-road, Camberwell, S.E.5.

CONTRACTS MANAGER Required to take full charge of the London office of a North-West firm of Building and C.E. contractors. Excellent prospects for man with initiative. Pension scheme.—Apply, with full details of age, experience and salary required, to Box 4255, "The Builder."

BUILDERS & CONTRACTORS, Home Counties, Require MANAGER to take charge of business. Applicant must be experienced in estimating for all classes of work up to £50,000. Good organiser, able to interview clients and deal with work from enquiry to final account. Unique opportunity for a good live, capable, man.—Reply, giving age, references, salary required, and fullest details of experience, Box 4200, "The Builder."

EXPERIENCED EXECUTIVE DIRECTOR. Small but financially strong Builders' and Plumbers' Merchants in North West have a vacancy. Pension scheme and car provided, and possible financial interest.—Box 4196, "The Builder."

OPPORTUNITIES occur for live men to take charge on various sites LONDON AREA. Able to produce work to a tight budget, thoroughly cost conscious, accurate, with flair for careful planning and organisation. All types considered whether with trade background or general academic background. State age, experience, education and salary required.

Box No. 4261 "The Builder"

SENIOR BUILDING EXECUTIVE

The opportunity occurs for someone with grass roots in the Industry to take charge of the Building section of a medium sized Company. Age about 35/45. Perhaps estimator trained. Property development experience an advantage. The position carries an annual income of about £1,750, with car provided and excellent opportunities for advancement to top level. Replies to—

Box No. 4165, "The Builder".

PLANNING OFFICER
(P.12)

The Building Advisory Service invites applications for the appointment of Planning Officer to a progressive medium-sized firm of Builders and Contractors on the South Coast.

Applicants, preferably aged 27–32, may have basic surveying or trade experience, but should be methodical, able to obtain technical decisions, carry out programme calculations, and prepare programmes and operational plans.

The appointment is pensionable, and assistance with housing will be provided.

Applications, stating age, education, experience in detail, and salary required, to:

B.A.S., 82, New Cavendish Street, London, W.1.

CLERKS OF WORKS

UNIVERSITY OF OXFORD. Holders of the Higher National Certificate are required to work as JUNIOR CLERKS OF WORKS under the supervision of a Works Superintendent on new laboratories, library buildings and smaller projects designed by well-known architects. Duration of jobs approximately two years with the possibility of further employment and advancement. Salary from £800 upwards.—Applications, in writing, giving details of experience and the names of two people from whom references can be obtained, to J. LANKESTER, M.A., A.R.I.C.S., A.M.T.P.I., The Surveyor to the University, The Malthouse, Tidmarsh-lane, Oxford.

EXPERIENCED CLERK OF WORKS Required for 17-storey building in London, commencing April, 1961. Duration about 21 months. Salary in the region of £1,200 per annum.—Write, giving full details, to DEARLE & HENDERSON, 75 Victoria-street, London, S.W.1.

CLERK OF WORKS Required in April for approximately 2 years to supervise important Secondary School Contract in Fleetwood, approximate value £150,000. Applicants must have a wide knowledge of all sections of the building industry. Salary £1,000 upwards plus lodging allowance if required.—Applications in writing, giving details of age, trade and experience and names of two referees, to T. MELLOR, A.R.I.B.A., A.M.T.P.I., Architect, Old Market Hall, Lytham, Lancs.

CLERK OF WORKS Required immediately for the building at Bishop Otter College, Chichester, of new hostels, chapel, dining hall, assembly hall, gymnasium, laboratories, etc., costing approximately £200,000 (approximately 15 months).—Please send application giving details of age, experience, salary required, etc., with copies of two recent references, to BRIDGWATER & SHEPHEARD, B.Arch., FF/A.R.I.B.A., 42 Bruton-place, Berkeley-square, London, W.1.

CLERK OF WORKS Required for the new extension to F. Medhurst, Ltd., departmental store, Bromley, Kent. The contract on stages 3 and 4 to commence March, 1961 (£150,000). Salary by arrangement.—Apply to H. G. PAYNE, L.R.I.B.A., 35 East-street, Bromley, Kent. Telephone RAVensbourne 4057.

CLERK OF WORKS Required with good experience of industrial works for large firm of Engineers in Midlands (tradesmen preferred). Assistance with house and able to drive.—Write stating age, salary required, experience, when available, and with testimonials in first instance, to Box 4214, "The Builder."

CLERK OF WORKS Required for the supervision of high quality, multi-storey dwellings on the Calthorpe Estate, Edgbaston, Birmingham. Contracts are due to commence almost immediately and the engagement will be for a minimum of 18 months, with the possibility of continuity of employment.—Applications to JOHN H. D. MADIN, 83/85 Hagley-road, Edgbaston, Birmingham, 16, should include full particulars of experience and details of previous Contracts on which the applicant has been engaged, stating in which capacity, to reach the above office as soon as possible. Salary by arrangement.

CLERKS OF WORKS, with experience of reinforced concrete and steel structures and foundation works. Required for projects in North-East London, Bedfordshire and South-East Scotland.—Write, giving particulars of experience and salary required, Box 4197, "The Builder."

CLERK of WORKS

required for permanent position with large Engineering company of world repute in N.W Area. Must have all-round general experience in building trades on Contract and Maintenance. Age about 35/50. Excellent working conditions. Security of employment. Contributory Pension Scheme with Life Assurance. Write giving full details of age, education, passed and present experience, to Personnel Manager,

Box No. 4232 "The Builder"

BUILDERS' ASSISTANTS

ASSISTANT (YOUNG) Required by Marylebone firm of Builders and Decorators, with general office experience. Able to estimate and prepare accounts for alterations, decorations and jobbing work. Permanent position with good prospects.—Apply, stating age, experience and salary required, to Box 918, "The Builder."

BUILDING MAINTENANCE ASSISTANT Required in Surveyors' Department of South Coast Brewery Company. Must have a good knowledge and experience of property repairs and decorations, including specification writing and dilapidations schedules. Ability to formulate traditional and contemporary decorative schemes essential. Permanent pensionable position after probationary period. Five-day week. Age limit 45.—Full particulars and salary required, to Box 4132, "The Builder."

THE INDENTED BAR AND CONCRETE ENGINEERING CO., Ltd., Require a REPRESENTATIVE, residing near London. Applicants must be experienced in dealing with Architects and Clients and to be prepared to spend some time on the actual design of reinforced concrete structures in the London office.—Write to 171 Victoria-street, London, S.W.1, stating age, salary required, etc., which will be treated in confidence.

A YOUNG MAN

aged between 16 and 19 required as assistant in the Buying Office of large expanding company of Estate Developers. Good salary and prospects offered to right applicant.

Apply:
Chief Surveyor,
McManus & Co. Ltd.,
Orchard House,
Orchard Parade,
Mutton Lane,
Potters Bar, Middx.

REPRESENTATIVES

REPRESENTATIVE

required for the

BIRMINGHAM TERRITORY

by a well established Company to promote sales of specialist industrial FLOORING AGGREGATES & WATERPROOFING ADDITIVES through architects and consulting engineers.

Excellent opportunity for an experienced salesman with knowledge of the building industry, who intends to earn not less than £1,500 per annum. Guaranteed minimum salary with very good commission. Car allowance.

Write in strict confidence quoting Ref. 262 *to:—*

The Personnel Officer,
The Cementation Company Limited
20 Albert Embankment,
London, S.E.11

REPRESENTATIVE

for Timber and Builders' Merchants. There is a good opportunity for a young man who really knows the job to sell for well-known company in South-West Essex.—Write, in confidence, giving fullest details of education, past experience, remuneration earned, etc., to

ROBERT J. WARD & CO.
Chartered Accountants,
3 Robert Street, Adelphi, London, W.C.2
and endorse envelope "Salesman".

AUSTINS OF EAST HAM LTD.
Assistant Representatives

Many young men who have gained experience in the Building Trade and who possess initiative and drive feel that their ambitions can only be satisfied by making selling their career.

Two appointments one for Kent, and one centred on Peterborough, are now offered to such men, aged 23-28, in the sales organisation of Austins of East Ham, selling Standard Wood Windows, Doors and Kitchen Units.

After initial training at Head Office suitable candidates will be given outside experience.

Apply to Sales Director,
2, Abbots Road, East Ham, London, E.6.
giving details of education and career.

AGENTS

CAN you control sub-contract labour? Can you get the job done speedily and economically? Can you organise sites with your own general foreman from commencement to completion? Can you ensure completions against a progress chart? If so, WE WANT YOU and you will be glad you joined. Salary, etc., by negotiation.—Ring High Wycombe 4383.

FIRST-CLASS AGENT Required for a large reinforced concrete superstructure contract commencing shortly in the London area. A good salary is offered to the right man who must possess drive, ambition and initiative. Other details such as bonus, etc., can be discussed during interview.—Write in confidence stating age, experience and previous employers, to Box 1031, c/o MURRAY & PHELAN Ltd., Columbia House, Aldwych, W.C.2.

CUBITTS

APPOINTMENTS

— see pages 62 and 63

AGENTS

Are you capable of taking complete charge of the erection from initial setting-out to final handing over of a £½m. multi-storey reinforced concrete office block in the city of London, including pre-planning, supervision of concrete operations to avoid inaccuracies, negotiation with architect and consultants, complete control of all site staff? State age, experience, education, salary required and when free.

Box No. 4233 "The Builder"

MARRIOTTS OF THE MIDLANDS

require

SITE AGENT

A first-class Site Agent is required by this expanding and progressive Company for a contract value £500,000 in Buckinghamshire. The appointment is permanent and reasonable mobility is therefore essential. Applicants should preferably be under 45 with the technical experience and management ability to justify a salary of up to £1,500 per annum.

Applications, in writing, giving full details should be addressed to :

Works Manager,
Robert Marriott Limited,
RUSHDEN,
Northamptonshire.

KYLE STEWART (CONTRACTORS) LIMITED

require

AGENTS AND GENERAL FOREMEN

in London and Home Counties for contracts between £100,000 and £500,000 in value. Must be experienced in all aspects of the trade, possess drive, initiative and up-to-date knowledge of mechanical plant management, preferably C. and J. Participation in company's bonus and pension scheme. First-class salary offered to successful applicants who will have opportunities for advancement to the position of Contracts Manager. Apply in writing stating experience and salary required to **Managing Director, Kyle Stewart (Contractors) Ltd., Ardshiel House, Empire Way, Wembley, Middlesex**

SENIOR SITE AGENTS

Applications are invited from senior men for permanent positions in a rapidly expanding organisation. A high salary will be paid to successful applicants and assistance with housing if required.

Box No. 4309, "The Builder"

AGENT/ GENERAL FOREMAN

required by large expanding building company of Estate Developers, mainly for work in the Home Counties. Applicants should have knowledge of private estate development and be capable of working on own initiative. Good salary, excellent prospects.

Apply: Mr. Metcalfe,
McMANUS & CO. LTD.,
Orchard House, Potters Bar, Middx.

Do you wish to specialise as a modern style

SITE AGENT?

If you have L.I.O.B. and/or H.N.C., aged 28/33, thorough technical training, able to organise speedy work to a tight budget, ambition and enthusiasm, please write to us stating age, experience, education, salary required.

Box No. 4242, "The Builder"

OLD ESTABLISHED CONTRACTORS

require

EXPERIENCED SENIOR AGENT

for large contract in Central LONDON.

Remuneration up to
£2,000 p.a.

Details to **Box 4324 "The Builder"**

TERSONS LIMITED

invite applications for the positions as

BUILDING AGENTS

in the Birmingham area to take charge of projects in advance of £250,000.

These positions offer an attractive salary, bonus arrangements and car allowance. With a view to permanency, assistance with housing may be available if required. Successful applicants will be invited to join the Company's pension scheme after a satisfactory trial period.

Written applications, in confidence, should be addressed to the Regional Manager, **Grove House, Sutton New Road, Erdington, Birmingham 23,** stating age, full details of experience and commencing salary required.

AGENT Required in East London area to take complete and entire control of £1,000,000 Contract lasting THREE YEARS. The Contract comprises the erection of 20 Blocks of Buildings including two eleven-storey, three eight-, and eight four-storey and traditional two-storey dwellings. Applicants are required to have considerable experience in the control and placing of reinforced concrete. —Write stating when free, age and offer, in strict confidence, particulars of experience with a view to preliminary interview for this early appointment, to the Director, WM. J. JERRAM Ltd., Sandford Works, Sandford-road, East Ham, E.6.

BUILDING and Civil Engineering Contractors Require SITE AGENT or ENGINEER AGENT with previous experience on contracts between £250,000 to £500,000 in Manchester area. Suitable applicants should have previous experience of housing (private, local authority), schools, multi-storey buildings, etc. Excellent opportunity for a person having the necessary qualifications.—State full details and salary requirements, to Box 4244, "The Builder."

SENIOR SITE AGENTS and ENGINEERS Required by North-West firm of Building and C.E. Contractors. Good prospects. Permanent position with pension scheme.—Apply, with full details of age, experience and salary required, to Box 4253, "The Builder."

FOREMEN AND SUPERVISORS

GENERAL FOREMEN Required for contracts. Greater London area. Good prospects for first-class men with drive and initiative.—Full particulars, including salary, etc., to Box 916, "The Builder."

GENERAL FOREMAN Required for London area.—Write stating full particulars, salary, etc., to Box 4038, "The Builder."

SENIOR GENERAL FOREMAN Required for North of England and London area, experienced in reinforced concrete multi-storey construction. Good conditions, pension scheme operating.—Apply in writing, giving details of experience to date, to Box 3550, "The Builder."

GENERAL FOREMAN Required medium-size Builders West London. Take full control works to £60,000. Details, age, wages, etc.—Box 3976, "The Builder."

GENERAL FOREMEN Required in Kingston/Surbiton/Richmond areas. Must be experienced in R.C. and multi-storey flat development. Ability to control sub-contract labour essential. Permanent position for men with drive and initiative.—Please write, stating age, experience (with names of previous employers), and salary required, to Box 3938, "The Builder."

CARPENTER FOREMAN

We have several vacancies on our permanent Contract Staff for young fully trained Foremen, age range about 28-30 years, with experience in reinforced concrete and shuttering on Civil Engineering and Building Contracts, who are ambitious and willing to graduate up to Senior General Foremen in a minimum period.
Applications to:

WILSON LOVATT & SONS LTD.,
Clarence Street,
Wolverhampton.

AGENT/ GENERAL FOREMAN

required (C. and J. preferred), for Contract in S.E. London. Must be fully experienced in deep foundations, reinforced concrete and steelwork structure, only first class men need apply—write stating age, full details of previous experience to:—

POOLMAN (Builders) Limited,
Sutherland House, Edgware Road,
Hendon, N.W.9.

SUPERVISOR Required by Berkshire Building Contractors. It is intended that a man of proved ability will eventually be promoted to Contracts Manager. This is a senior position with appropriate salary and conditions.—Applicants, age 30/40, with necessary capabilities and ambitions, apply, stating age, experience, etc., to Box 4102, "The Builder."

SUPERVISOR/FOREMAN PAINTER Required by East London Contractor for good-class work generally in London area. Must be keen disciplinarian and able to estimate an advantage.—Apply, giving full details, including salary required, to Box 4101, "The Builder."

GENERAL FOREMAN

with extensive experience of roads and sewers required for contracts in Home Counties. Must be able to set out and control labour. Well paid permanent job.

Apply: Chief Surveyor

McMANUS & CO. LTD.
Orchard House,
Potters Bar, Middlx.
POTters Bar 2315.

GENERAL FOREMAN

required for block of flats near Tonbridge, Kent. Opportunity in a rapidly expanding Company for a go-ahead man to secure further promotion. Modern thoughts and techniques appreciated. Write in the first instance to

G. T. Crouch Ltd.,
Kingston House, Stephenson Way, Three Bridges, Crawley, Sussex.

GENERAL FOREMAN Required for Contract at Northwood.—Please apply, with full particulars, to CHARLES BRIGHTMAN & SON, Ltd., Eburyroad, Watford.

GENERAL FOREMAN (Bricklayer or Carpenter/Joiner preferred) Required by Civil Engineering Department of expanding Building and Civil Engineering Contractors operating in Southern England. Only top-class men need apply. Permanent position, good wage and bonus on results to right man.—Write giving age and past experience to NICHOLSON CONSTRUCTION COMPANY, Ltd., Freeland House, Cranleigh, Surrey.

FULLY EXPERIENCED OUTSIDE FOREMAN DECORATOR Required. Able to organise and run completely decorating department.—Write, stating experience over last fifteen years, to Box 4139, "The Builder."

TRADESMAN FOREMEN Required for sewage works contracts near Maidenhead and Uxbridge.—Only men fully experienced on this class of work should apply, in writing, to RUDDOCK & MEIGHAN, Ltd., Burford House, Harrow View, Wealdstone, Middlesex.

GENERAL FOREMEN for private enterprise building in the Home Counties. Good salaries and permanent positions to suitably experienced men.—Write with full details of experience and present salary to:—Personnel Officer, M. J. GLEESON (CONTRACTORS) Ltd., Haredon House, London-road, North Cheam, Surrey.

GENERAL FOREMAN

required immediately to control Estate Development in the Greater London area (South East). Must have experience in roads and sewers, house and flat construction, able to use Dumpy, set out and produce a high standard of finish.

Good salary with annual bonus based on results.

Apply in confidence, giving fullest details of previous experience to:

Production Director,
Federated House, East Street,
Epsom, Surrey.

BERNARD SUNLEY & SONS

require

First class

GENERAL FOREMEN

with experience of contracts ranging in value between £30,000 and £300,000, in the Northampton area. Applications invited from men with experience of good class work carried out along preplanned lines.

Please write giving full particulars to

Contracts Manager,
Sunley Works, Hemel Hempstead.

GENERAL FOREMAN Required by Building Contractors for contracts ranging from £100,000 to £200,000 in the Eastern Counties, Wiltshire and Oxfordshire.—Reply, giving full particulars of age, salary and experience, etc., to F. R. HIPPERSON & SON Ltd., Invicta House, Wantz-road, Dagenham.

GENERAL FOREMAN Required to work and supervise erection of flatlets, Wimbledon area. Elderly man preferred, bricklayer if possible. About 9 months' work starting April.—Write, stating salary required, Box 4310, "The Builder."

SENIOR GENERAL FOREMAN Required for North of England and London area, experienced in reinforced concrete multi-storey construction. Good conditions, pension scheme operating.—Apply in writing, giving details of experience to date, to Box 3550, "The Builder."

GENERAL FOREMAN Required, Contract £38,000 Office Block, North London, lasting approximately nine months with continuity if proved satisfactory.—Write giving details of past experience, age and salary required, to Box 4110, FROST-SMITH ADVG., 64 Finsbury-pavement, E.C.2.

GENERAL FOREMAN Required by Building and C.E. Contractors. North-West area. Permanent and progressive position with pension scheme.—Apply, with full details of age, experience and salary required, to Box 4254, "The Builder."

GENERAL FOREMAN Required for visiting and supervising smaller contracts (up to £10,000); also alterations, repairs and decorations. Car driver.—Apply, in writing, stating age and experience, to GRACE & MARSH, Ltd., New Bridge Works, Waddon, Croydon, Surrey.

GENERAL FOREMEN Required for contracts in London and Maidstone, Kent.—Apply, RICHARDSON, Herbert House, Slade Green, Erith, Kent.

GENERAL FOREMEN Required for contracts, East London area: (a) £60,000; (b) £120,000. Excellent future prospects for successful applicants.—Write, stating age, trade, experience and when free, Wm. J. JERRAM, Ltd., Sandford Works, East Ham, E.6.

SUPERVISOR Required for small works department of South London Builders. Able to organise and run contracts under limited supervision. Driver.—TAMWORTH PARK CONSTRUCTION CO., Ltd., 54 Tamworth Park, Mitcham.

SUPERVISOR for Fencing Contracts, based in London area. Experience in taking working details, arranging programmes, agreeing variations and organising labour at site, is necessary. Car provided. Salary according to experience. Permanent position.—Reply stating age, knowledge of the industry and salary required, to Box 4227, "The Builder."

GENERAL FOREMAN Required on permanent staff of Building and Civil Engineering Contractors, for large contracts in Kent. Applicants must be between 30 and 55 years of age, knowledgeable in all trades and with at least five years' previous experience in a similar capacity.—Write giving details of experience and salary required. Applications will be treated in confidence.—Box 4212, "The Builder."

GENERAL FOREMAN for £35,000 Flats Contract, Barnet area. Must be efficient, enthusiastic and cost-conscious.—Write full details of experience, references, etc., and salary required, to Box 4209, "The Builder."

GENERAL FOREMAN Required for contracts from £5,000 to £25,000 initially. Young man with ambition, able to use level, and cost conscious required. Experience not essential.—Apply, in writing, H. PARFITT & SONS, Ltd., 852 Harrow-road, Wembley.

BRICKLAYERS

REQUIRED IMMEDIATELY. Man with good knowledge of facing bricks and for taking charge of quotation section of well-known London Builders' Merchants. Own employees know of this advertisement.—Full particulars to Box 4142, "The Builder."

CLERKS

PLANT HIRE. MANAGER'S ASSISTANT Required. Permanent post. Duties mainly clerical but knowledge of contractors plant essential. Travelling or removal expenses could be defrayed.—Write LOVELL PLANT HIRE Ltd., Halifax-road, Cressex Industrial Estate, High Wycombe, Bucks. (Telephone: High Wycombe 2305.)

JOINER-TRAINED ORDER CLERK Required in head office of established Building Contractors, S.W.16. Capable of taking-off from drawings and preparing materials schedules for buyer.—Write, Box 4168, "The Builder."

LEDGER CLERK Required by group of three small companies within building industry. Some knowledge wages and P.A.Y.E. an advantage. Commencing salary up to £600 per annum.—BELL & ASSOCIATED COMPANIES, 58 Kensal-road, W.10. LAD 6571.

CONTRACTS SUPERVISOR

Keen experienced man required for a fast-expanding firm of Estate Developers operating in the South Eastern Counties. Able to control a number of projects.

Must have sound practical and technical knowledge of building construction, works study/bonusing, setting out, levels, etc. Capable of leading and handling men on site to complete contracts to schedule and where necessary handle small projects without the assistance of General Foreman. Must be car driver.

This appointment will be permanent with excellent opportunities for promotion later on.

Good salary with annual bonus scheme based on results,

Company car provided. Pension Scheme is in operation.

Apply, in confidence, giving fullest details of previous experience and qualifications to: The Production Director,

FEDERATED HOMES LTD.
FEDERATED HOUSE,
EAST STREET,
EPSOM, SURREY

TAYLOR WOODROW CONSTRUCTION LIMITED

require an

ASSISTANT COST ACCOUNTANT

for process costing system. Pension Scheme. Excellent opportunity. Write giving full details of past experience and present employment, which will be treated in strict confidence, to:

Personnel Manager,
Ruislip Road, Southall, Middlesex

TAYLOR WOODROW CONSTRUCTION LIMITED

require for

Building and Civil Engineering Sites

EXPERIENCED WAGES CLERKS, TIMEKEEPERS and CHECKERS

Mobile and willing to work hard for advancement. Good salary, Pension scheme. Interviews at Southall, with travelling expenses paid, can be arranged at any time including early evenings and Saturday mornings.

Write giving details of experience, etc., to:

Personnel Manager,
345 Ruislip Road, Southall, Middlesex.

PROFESSIONAL FIRM in Iran require the following staff for service in the Middle East:

(i) **Three qualified architects**
(ii) **Qualified civil engineer**
(iii) **Qualified electrical engineer**
(iv) **Materials engineer**
(v) **Architectural draughtsman**

The requirements for the above positions are as follows:

(i), (ii) and (iii): Associate membership of a recognised professional institute and having minimum of 3–4 years' experience after qualification.

(iv): 8–10 years' general experience in the recognition, selection and approval of all classes of materials used in general building work and services distribution including electrical materials, pipes and pipe fittings.

(v): 5–7 years' experience as architectural draughtsman or assistant thoroughly conversant with Architectural and Building Codes and Practices.

Salaries shall be not less than £200 per month tax free for positions (i), (ii) and (iii) and £150 per month tax free for positions (iv) and (v).

All appointments will be for a period of six months in the first instance with the probability of extension of contract by mutual agreement. Free furnished bachelor accommodation and return air passages provided.

Interviews will be held during the fortnight commencing 13th March, 1961. Replies stating age, qualifications, experience and when available, to **Box No. 4318, "The Builder"**

BUILDERS CLERK

required for Reading with experience of ordering materials, checking time/wage sheets, deliveries and general office routine. Housing accommodation can be made available. Apply in writing giving details of experience, age and when available to :—

Box No. 4259 "The Builder"

COST CLERK

Experienced small works and jobbing, good salary. Age, experience, salary required, to:

F. W. BARNARD LTD.,
1/2 Babmaes Street, S.W.1.

ACCOUNTS CLERK Required for Builders' office at Ealing, for invoice checking and costing housing contracts. The applicant must be quick and accurate at figures.—Apply, GENERAL HOUSING CO., Ltd., 57/59 Uxbridge-road, Ealing, W.5.

CIVIL ENGINEERING CONTRACTOR Requires **SECRETARY** (part-time may be considered). N. Finchley area. Some knowledge of estimating and accounts desirable. Good prospects for the right man.—Box 4086, "The Builder."

MALE, willing to be trained as Builders' COST CLERK, or person having experience in this field. Hours 9 a.m. to 5.30 p.m. Alternate Saturdays, 9 a.m. to 12.30 p.m. Kingston area.—Apply, full details, Box 4074, "The Builder."

NATIONAL 3000 OPERATOR. Kingston area. Five-day week.—Apply, full details, Box 4075, "The Builder."

COST CLERK Required by Building and Civil Engineering Contractors in Westminster area. Must be experienced in the Building Industry and capable of handling Cost Ledgers, etc. Staff pension scheme. —Write stating age, experience and salary required, to Box 4292, "The Builder."

COST CLERK, with experience of preparation of building, decorating, etc., accounts. Permanent position.—Write, giving full details, salary required, etc., to Secretary, TROLLOPE & SONS (LONDON), Ltd., 11a West Halkin-street, London, S.W.1.

BUILDERS' CLERK Required by group of three companies for bought invoice and plant departments. Experience with Builders' Merchants of advantage but not essential. Commencing salary £600-£700 commensurate with ability.—BELL & ASSOCIATED COMPANIES, 58 Kensal-road, W.10. LAD 6571.

BUILDERS' CLERK (Male) Required in City bank. Age not to exceed 30. Previous experience with time sheets, invoices, etc., an advantage.—State, in own handwriting, age, experience, etc., to Box 4202, "The Builder."

CIRCULARS

A box number is a service designed to help the advertiser. It is NOT a medium for circularising. Circulars addressed to a box number will not under any circumstances be forwarded

MISCELLANEOUS

Isle of Jura

A general handyman required, able to carry out work in the maintenance of buildings on the Island, such as farm-houses, outbuildings, houses, etc. A house, power and coal will be provided, wage to be agreed according to ability.

Please apply to **F. A. Riley-Smith, Inholmes,** Tadcaster, Yorkshire, by the 25th March, 1961.

OVERSEAS APPOINTMENTS

Prepaid rate, 24 words, 8/6; additional 6 words, 2/-. Box number, including Forwarding Replies, 2/-.

JAMAICAN OFFICE of London firm of Quantity Surveyors has vacancy for an ASSISTANT RESIDENT for a responsible position. Car provided and free passages for surveyor and his family. Three-year tour, with opportunity for extension.—Apply, with full details, to Box 913, "The Builder."

SENIOR QUALIFIED QUANTITY SURVEYOR, to take charge of West African branch office of London-based professional firm. Responsible and challenging position with commensurate salary, free accommodation and passages for surveyor and family. Car provided. Preliminary period to be spent in London office.—Apply, with brief details, to Box 906, "The Builder."

QUANTITY SURVEYORS Require qualified men for offices in Sydney and Perth, Australia.—Write, stating age, experience and salary required, Box 919, "The Builder."

SYDNEY, AUSTRALIA. A vacancy occurs for experienced TAKER-OFF. Commencing salary £A1,900, excluding overtime. Fare paid.—Box 4047, "The Builder."

SYDNEY, AUSTRALIA. Experienced TAKER-OFF Required. £A1 per hour, 50-hour week, 1-year contract. Fares paid both ways.—Box 4048, "The Builder."

SYDNEY, AUSTRALIA. Young TAKER-OFF, with at least 10 years' experience in a Quantity Surveyor's office. Required for 2-year contract. Commencing salary £A1,750. Return fares paid.—Box 4049, "The Builder."

AUSTRALIA, MELBOURNE and SYDNEY. Vacancies for experienced TAKERS-OFF. Salary up to £2,500 including overtime and bonus.—Box 4050, "The Builder."

SENIOR QUALIFIED SURVEYOR to take charge of Branch Office in Arabian Gulf. Salary at least £2,000 per annum. Two-year tour with intermediate leave. No income tax at present, free accommodation, favourable transport arrangements.—Apply with full details to Box 977, "The Builder."

SUPERINTENDENTS OF WORKS Required to supervise building projects at Accra Airport, Ghana. The appointment will be for a period of about 2 years. Applications in writing stating age, qualifications, experience and giving the names of two referees, should be addressed to NORMAN & DAWBARN, Architects and Consulting Engineers, 7 Portland-place, London, W.1, and must be received not later than 6th March.

GOVERNMENT OF KUWAIT

PUBLIC WORKS DEPARTMENT

urgently require

EXPERIENCED QUANTITY SURVEYORS

capable of handling interim payments and final accounts of re-measurement contracts between £½m. and £2m. Age 35-45. Salary starting £2,175 p.a. rising by annual increments of £125 to £2,550 p.a. Free passages, quarters, medical and dental treatment. Married quarters and free passages for family after first year. Write for application form to:

Box 4073 "The Builder"

TAKERS-OFF, Australia (Sydney and Melbourne). Experienced TAKERS-OFF Required for three-year contracts. £A1,900, £A2,000, £A2,100 plus considerable overtime at time-and-a-half, bonus on completion of contract. Fares to Australia paid. Perfect working conditions. Extra holidays. Continuation contract may be obtained.—Box 4046, "The Builder."

CONSTRUCTION COMPANY IN GHANA

requires

CIVIL ENGINEER

experienced in roads and bridge construction to supervise new road construction, age 25 to 30, salary £1,500 to £2,000 according to experience.

Also

GENERAL FOREMAN

experienced in all types of large-scale building work. Experience in hospital construction would be an advantage. Salary in the range £1,000 to £1,400 initial contract of 18/24 months, free passages, free medical attention, free accommodation with hard furnishings, car provided or loan for car purchase.

Apply Box No. B.672,
c/o WALTER JUDD Ltd.,
47 Gresham-street,
London, E.C.2.

SALARIED PARTNERSHIP with 3 year trial period offered to Qualified (R.I.C.S. only), experienced and energetic QUANTITY SURVEYOR in new practice in West Indies. Age limits 30/40. Applicants must be capable of handling schemes of any magnitude from Approximate Estimate stage to Final Account, fast and accurate in Taking-off and not above squaring dimensions when occasion demands. Applications which do not completely meet above requirements will not be considered.—Write giving full details to C. T. R. KELLY & PARTNERS, 8 Manchester-square, London, W.1.

CHARTERED QUANTITY SURVEYORS in Tehran Require the following staff for service in the Middle East: (i) Qualified QUANTITY SURVEYOR for tour of six months in the first instance. Salary £200 per month tax free; free furnished bachelor accommodation. This position affords an excellent opportunity for concentrated saving over a short period and there is the probability of extension of contract by mutual agreement. (ii) TAKERS-OFF, aged 23-27 years, with minimum of three years' Taking-off and/or Site Measuring experience with professional firm. Two-year contract; salary £2,000 per annum plus £500 per annum leave pay on satisfactory completion of tour; income tax at present 10 per cent. Interesting work covering projects in several Middle East centres. Higher salary considered for qualified candidates. Interviews for both (i) and (ii) will be held during the fortnight commencing 13th March, 1961.—Replies, stating which post applied for, age, qualifications, experience and when available, to Box 4317, "The Builder."

SYDNEY.—Chartered Quantity Surveyors Require TAKERS-OFF, preferably recently qualified. Good salaries, plus overtime. Initial accommodation provided. Interview in London during next two weeks.—Box 4224, "The Builder."

ZARIA, NIGERIA.

CLERK OF WORKS/SENIOR ESTATE AND MAINTENANCE OFFICER.

Required by Nigerian College of Arts, Science and Technology, to serve at the Enugu or Ibadan Branches of the College

Appointment on conditions similar to Government Service on the scale £1,032-£1,314 (six increments) (pensionable) or £1,140-£1,440 (contract). Contract appointments for two tours of 15-24 months.

The duties of the post include responsibility for maintenance of college property and minor construction and as Clerk of Works some supervision of a diminishing building programme.

Passages provided for person appointed and wife, on appointment, leave and termination. Assistance with children's passages, allowances for children domiciled separately; gratuity at £100-£150 per annum for contract staff. Inducement allowance £180-£300 per annum for overseas staff.

The person appointed must be suitably qualified by examination and experience.

Further particulars and forms of application from the Registrar, Nigerian College of Arts, Science and Technology, Zaria.

SERVICES OFFERED

Minimum 8s. 6d. (24 words)
Each additional 6 words 2s. Box number, Including Forwarding Replies, 2s.

CONTRACTOR'S ESTIMATES. Building and Civil Engineering; competitive pricing at current rates. Alterations our speciality.—AMALGAMATED BUILDING SERVICES, 70 Bridge-road, Chessington. 'Phone: Epsom 4255.

Estimates

BES

prepared from Plans or Bills of Quantities, site measuring, final accounts, etc. Phone or write for brochure.

The Builders' Estimating Service Ltd.

2, WESTMINSTER BANK CHAMBERS, SHEPHERDS BUSH, W.12. Phone SHE 7975

There are also fully staffed B.E.S. offices in Manchester, Birmingham and Worcester.

ESTIMATING CONSULTANTS (BUILDING) LTD.

do away with "Guesstimating". Have your estimates properly prepared from your quantities or Specifications and Drawings. Our moderate charges are a saving on your own valuable time.

Details on request. **76, Kew Road, Richmond. Phone: RIChmond 7512.**

Estimating made easy

Your estimates and Tenders prepared from the 2—6 figure Contract for all types of work from Plans or Quantities, executed promptly.

Extract from Client's letter:—
"Please price the enclosed Bills for job at . . . . . The last Bills you priced for us was successful by £146 8s. 9d., which we consider very close estimating for a five figure Contract."

May we try to obtain results like this for you?

Details of service sent on request

BUILDERS ASSOCIATED SERVICES
FOUNDRY RD. : CINDERFORD : GLOS.
Phone: Cinderford 2368/9

THE SITE SURVEY COMPANY

BLACKHEATH, S.E.3. **Tel.: LEE Green 7444-5**

Fully equipped to undertake urgent surveys in any part of the country and abroad. Specialists in ½" scale detailed surveys for extensive city development areas.

BUILDERS' ESTIMATES accurately prepared from Bills of Quantities, plans and specifications. Prompt, efficient service.—VICTOR H. FERN, 21 Tettenhall-road, Wolverhampton. Telephone: Wolverhampton 24406-7.

QUALIFIED QUANTITY SURVEYORS with own Central London office offer assistance to the profession.—Tel: CHAncery 4246-7.

SPECIALIST SERVICES offered to the Building industry comprising preparation of Estimates, Buying and Piecework Schedules.—Details on request from WOOLGAR, KENT & ASSOCIATES, Estimating Surveyors, 51 High-street, Bridgwater, Somerset. Telephone: Bridgwater 3635.

PLANS prepared from rough sketches. 4 prints, 1 coloured, from 40s.—G. B. SPENCER, Architectural Designer, 315a, London-road, Westcliff-on-Sea, Essex.

BUILDERS' ESTIMATES accurately prepared from Quantities, Plan and Specification, or site only. Over 35 years of reliable nation-wide service.—THE BUILDERS' ESTIMATOR, 14 Bute-street (also at 73 New Bedford-road), Luton, Beds. Tel: Luton 8077.

B. P. DAVIS for advice or service in ESTIMATING Quantities, Plans, Accounts, Incentive bonusing.—156 Pytchley-road, Kettering, Northants.

HEATING. Schemes designed, "small bore," etc., working plans prepared. Terms moderate.—W. A. BRADBROOK, 108 Lebanon-road, Croydon. 'Phone: ADD 4858.

SURVEYOR (F.R.I.C.S.) offers free-lance services to profession; land, buildings, specifications, dilapidations, drawings.—Box 3348, "The Builder."

SENIOR TAKER-OFF, Free Lance, with many years' varied experience in all branches of the profession, offers assistance as responsible Taker-off, Worker-up, etc. London and Home Counties. Most reasonable terms.—Box 3816, "The Builder."

CITY CALCULATIONS LTD.

SPECIALISTS IN COMPUTATIONS

for

QUANTITY SURVEYORS and CONTRACTORS

Dimensions Squared · Abstracts Cast and Reduced
Bills Extended and Cast · Increase Costs Claims Checked

22, LITTLE RUSSELL ST., W.C.1 CHAncery 3171

CONFIDENTIAL SERVICE QUICKLY EXECUTED

Architectural & Technical Consultants

Use us as your own Architectural or Technical Section.
Designs, Working Drawings, Details, Surveys, etc.
Experienced in all types of Buildings including estate layouts and obtaining local authority approvals.
We will co-operate with your own specialist departments if necessary.
Full co-operation and complete confidence.
JUST PHONE WALLINGTON 9883 AND PRINCIPAL WILL CALL ANYWHERE TO TAKE INSTRUCTIONS.

PLUMBING QUANTITIES priced by experienced Estimator. Essential service for builders and sub-contractors. Enquiries dealt with promptly and efficiently.—Box 3925, "The Builder."

QUALIFIED SURVEYORS with offices in London can offer services to the profession in the carrying out of Structural Surveys at short notice and in the preparation of Drawings, Specifications, Schedules of Dilapidations, etc. Fees by arrangement.—Write Box 4181, "The Builder."

QUALIFIED QUANTITY SURVEYOR can accept commissions from the profession for the preparation of Bills of Quantities, Estimates, Site Measuring and Final Accounts.—Box 4068, "The Builder."

CHARTERED QUANTITY SURVEYOR, A.R.I.C.S., experienced taking-off, accounts, etc., offers free-lance services to the profession, 20s. per hour.—Box 4218, "The Builder."

CHARTERED QUANTITY SURVEYOR with small group of assistants, offers services to the profession. Preparation of bills of quantities complete, or taking-off.—Box 4234, "The Builder."

CHARTERED ARCHITECT, about to commence own practice, offers services from new development to improvement grants.—Box 4215, "The Builder."

124 HOUSE and BUNGALOW PLANS 4s. 3d. 64 Designs ¼ in. scale, 6s. 9d. Working drawings from sketches £3-£5.—D. PARTRIDGE, The Bank, Ebley, Stroud, Gloucestershire.

FREE-LANCE TAKER-OFF, with very considerable experience, offers assistance to the profession, or would undertake site duties for profession. Manchester, Liverpool, N. Wales areas.—"A.R.I.C.S.", 218 Broadstone-road, Heaton Chapel, Stockport. Tel. HEA 3089.

SITUATIONS WANTED, ETC.

Minimum charge 3s. (24 words)
Each additional 6 words, 1s. Box number, Including Forward Replies, 1s. 3d.

PROVIDENT INSTITUTION OF BUILDERS FOREMEN and CLERKS OF WORKS
(established 1842)
1, THROGMORTON AVENUE, LONDON, E.C.2.
(By kind permission of the Worshipful Company of Carpenters.)

CONTRACT MANAGERS, CLERKS OF WORKS, AGENTS and STAFF FOREMEN are invited to apply for membership of this Institution, which has for over a century granted pensions to members and their widows and so assist to maintain the status and promote the interests of supervisory staff in the Industry. Architects, Builders and Civil Engineers requiring efficient staff as above are requested to contact the

General Secretary,
J. W. TILLER, L.I.O.B.,
Flat 7, 37/8 Dorset Square,
London, N.W.1.
Phone: AMBassador 5473.

JUNIOR ARCHITECT'S ASSISTANT Requires employment in Architect's office, London area. Neat and careful draughtsman.—Box 4205, "The Builder."

SHOPFITTING DESIGNER DRAUGHTSMAN (39), conversant all branches shopfitting, present situation Chief Designer, desires change, preferably Northern area Representative to Southern Shopfitter. Car owner. Office premises Yorkshire. Twenty years' experience.—Reply Box 4207, "The Builder."

CHARTERED Q.S., own practice and freelance work, seeks situation with larger establishment preferably on associate basis. Fully experienced all aspects of large contracts and staff control. Interested in cost planning and research.—Replies Box 4045, "The Builder."

SENIOR QUANTITY SURVEYOR Requires permanent position in Herts./Essex area offering improvement on £950 and car. Unqualified, but with experience of various types contract including W.D. schedule.—Box 3921, "The Builder."

YOUNG QUANTITY SURVEYOR, 24, seeks responsible post with progressive office. R.I.C.S. Intermediate standard experience includes Taking-off, Final Accounts, Interim Valuations and Site Measuring.—Please apply to Box 4266, "The Builder."

A.R.I.C.S. (QUANTS.), able to act on own initiative in seeing contracts through from Taking-off, via Specification, Variations and Certificates, to agreement of Final Account, seeks progressive position which will widen his experience which has mainly been concerned with flats, offices, schools and hospitals.—Box 4269, "The Builder."

L.I.O.B., 29 years, Requires position Quantity Surveying/Estimating where honesty counts. Experience with Contractors. Preferably S.W. London.—Box 4271, "The Builder."

QUANTITY SURVEYOR living Sussex, easy access London, Requires work at home. Working-up Abstracting, Billing and Final Accounts. 8/6d. hour. Full-time offered.—Box 4282, "The Builder."

SURVEYOR, 25 years in Building Contracting, seeks position in Cost Analysis, personal Assistant or other senior position of responsibility in connection with building for industry generally or any other interested person or party. Salary required, £1,600-£2,000, depending on conditions, etc.—Box 4149, "The Builder."

SURVEYOR, 22, H.N.C., offers services evenings and week-ends. London area. Working-up, junior taking-off, surveys, plans, etc.—Box 4184, "The Builder."

ESTIMATOR/SURVEYOR, age 42, now with medium-sized Poole contractor, in sole charge from enquiry to final account, fully experienced all types of work, seeks senior position with prospects in South West or South Coast with larger organisation. Extensive experience of contract organisation, ordering materials, labour management, etc. and would consider suitable managerial position.—Box 4119, "The Builder."

YOUNG SURVEYOR Requires position overseas. Experienced Working-up, Site Measuring, Final Accounts, etc.—Box 4327, "The Builder."

YOUNG MAN (33), A.I.Q.S., L.I.O.B., H.N.D., seeks position in research, technology or similar field. Currently employed as contractor's surveyor. Resident Herts.—Box 4241, "The Builder."

KEEN YOUNG MAN, 19, seeks position as TRAINEE BUILDING SURVEYOR in or near Westminster. Details on reply.—Box 4217, "The Builder."

BUILDER SURVEYOR (25 years), H.N.C. Finalist. Able to deal with site work, remeasurement and sub-contractor final account v.o.'s, increased cost, etc., seeks position with builder or in Q.S. office in London or London area. Two years' extensive experience.—Box 4221, "The Builder."

ARCHITECTURAL & BUILDING SURVEYOR, with 35 years' experience in design, construction, supervision and general administration, seeks Executive position where capabilities will be made full use of. Particularly interested in Industrial and Brewery work. At present employed by large manufacturing company in Lancashire with full maintenance and capital works staff. First-class man for right organisation; capable of complete control in all departments, to be responsible to Works or Managing Director.—Box 4188, "The Builder."

SENIOR SURVEYOR, late thirties, Quantity Surveyors or Contractors, all types of work, all branches. Taking-off, Measuring, Valuations, Final Accounts, Estimating, Schedules, etc.—Box 4325, "The Builder."

PLASTERING SURVEYOR, Bonus and Valuations. Requires position.—Box 4275, "The Builder."

EXPERIENCED TAKER-OFF, Chartered, seeks permanent responsible post in London or Surrey. London trained. Highest reference. Administrator with initiative and drive. Reasonable salary.—Box 4267, "The Builder."

JUNIOR TAKER-OFF (26), recently sat R.I.C.S. Inter., Requires position with C.Q.S. where further experience in Taking-off may be obtained. Prepared to do Working-up, Site Measuring and levelling as occasion demands. Salary £900 p.a.—Box 4278, "The Builder."

JOINERY ESTIMATOR (with practical background), experienced in Pricing from Drawings and Bills of Quantities, seeks position.—Box 4272, "The Builder."

DIRECTOR/MANAGER, F.I.O.B., age 49, of medium-large National Building Contractors, seeks administrative post in the Industry where high standard of organising ability is needed. Surveyor by training. Free end of February.—Apply Box 3809, "The Builder."

AREA MANAGER Requires position Supervisor or C/W considered. Last position twelve years. Age 53. Willing to travel. Own car. South/South-West preferred.—121 Northfield-road, Ringwood, Hants. 'Phone: Ringwood 2681.

BUILDING STUDENT, passed Higher National Certificate, City and Guilds Quantities, taking L.I.O.B. in September, seeks employment with Building firm as training Building Management, Estimator/Surveyor, Site Engineer or Survey Dept., has three years' experience as Site Engineer, Measuring and Cost/Bonus Surveyor.—Box 4071, "The Builder."

CONTRACTS MANAGER/SUPERVISOR seeks post. Contract organisation and supervision. Trade-trained, keen and cost conscious; own car. S.E. England.—Box 4067, "The Builder."

DIRECTOR MANAGER of plastering company, 35 years' experience, desires change.—Box 4124, "The Builder."

SITE MANAGER (Building), highly successful career with a wealth of experience of the whole trade, development of high-class private housing sites, also any other type of high-class building work, seeks position with building firm Dudley, Wolverhampton areas.—Please write to Box 4185, "The Builder."

GENERAL MANAGER of medium-sized Builders seeks position with more scope. Experienced in Spec. Housing, general Building and Property Development. West Surrey area preferred. Present salary £2,500.—Reply in confidence to Box 4239, "The Builder."

MANAGER/ESTIMATOR/SURVEYOR. Senior post Required by experienced, responsible, live man, 39. Control of works, organisation and supervision London area. Salary £1,250 plus car.—Box 4276, "The Builder."

EXECUTIVE fully experienced all aspects of property development from land acquisition to sales, would consider joining established Contractor wishing to enter this field.—Box 4315, "The Builder."

BUILDERS' MANAGER desires change, with Quantity Surveyors preferred. Knowledge measuring. Age 57. Not afraid of work, or would consider supervisor. Salary £1,300.—Box 4216, "The Builder."

AREA MANAGER/SUPERVISOR, 44, architecturally trained, Final standard R.I.B.A., 18 years' experience in alterations, conversion and maintenance of high standard and in handling contracts from inception to final account, versatile, Requires progressive position with responsibility in property owning company.—Box 3761, "The Builder."

GENERAL MANAGER, 36, experienced all types development, Building and Civil Engineering from negotiation to Final Account, both in U.K. and overseas, seeks responsible position with expanding company.—Box 4206, "The Builder."

BUILDING STUDENT (Nigerian). Passed Ordinary National Certificate, pursuing Higher National Certificate and Institute of Builders exams. Seeks employment with a building firm as a trainee in building management, site engineer or survey dept. Has 3 years previous experience in site supervision, accounts dept., quantity surveyor's office (Billing). Good knowledge in estimating.—Box 4189, "The Builder."

CLERK OF WORKS, served overseas for last eight years and would prefer further contract of this nature. Excellent health, fully conversant with all types of construction including large R.C. framed buildings. Has worked on own initiative and taken full responsibility.—Box 3743, "The Builder."

CLERK OF WORKS. Now employed as such in U.K., desires post abroad; 43, unmarried, 10 years experience overseas, concrete construction, architectural finishes, multi-storey, etc.—Write, Box 3947, "The Builder."

BUYER, with twelve years' comprehensive experience of Building and Civil Engineering, Requires senior position with progressive company. Salary by negotiation.—Box 3985, "The Builder."

ASS. MAN., exp. in high-class partitions, luxury interiors and all sub-contract trades, applicant well connected, able to introduce business, seeks opportunity with progressive company where ideas and ambition are recognised. London and Essex areas. Box 4281, "The Builder."

YOUNG MAN, single, age 27, seeks change, preferably Liverpool area. Eleven years' builder's office experience, seven years quantity surveyor's department, experience in sub-contractor's accounts. Day-works cost variations, etc. Car driver. Would consider complete change.—Box 4279, "The Builder."

STUDENT, O.N.C. (BUILDING) seeks position as JUNIOR ASSISTANT in Builder's, Contractor's, Quantity Surveyor's or Architect's office. Two years in architect's office and 3 years as building supervisor. Good knowledge of building construction, builders' quantities, account, and book-keeping. Able to prepare specification schedule of fittings (ironmongery), estimates, jobbing and final accounts. Any reasonable wage accepted.—Please reply, Box 4238, "The Builder."

A BUILDERS' ASSISTANT, age 28, with eleven years' planning and general all-round building experience of small and large contracts, house building and alteration works, seeks position as Assistant to contract manager or building supervisor in London or Southern area.—Box 4236, "The Builder."

BUILDERS' ASSISTANT, semi-retired, active, conscientious, seeks position. Life practical experience and intensive training on quantities, estimating, accounts. Capital available. Easy access W. R. Yorkshire.—Box 4187, "The Builder."

AGENT/GENERAL FOREMAN, age 39, seeks position London area. Varied experience, use instruments. Medium to large contracts, good organiser, use own initiative. Own car.—Box 3817, "The Builder."

PAINTING FOREMAN/SUPERVISOR Requires position with a go-ahead firm. Used to strict labour cost and full control. Experience in all branches of trade, own car.—Box 4145, "The Builder."

AGENT/GENERAL FOREMAN, C. and J., age 48, own car, residing London area. Sole control large or medium size Contracts all types. Flats, Housing, Schools, Factories, Roads and Sewers, etc. Used to Sub-Contract labour only. Have completed contracts up to £750,000. Good references. Willing to travel. —Box 4159, "The Builder."

GENERAL FOREMAN, C.&J. Experienced, medium to large contracts. Use dumpy, setting-out. Good organiser. Age 39. Own car. N.W. London. Disengaged.—Box 4237, "The Builder."

JOINERY SUPERVISOR, experienced in all duties appertaining to purpose made Joinery, including Production, Estimating, Buying, etc., seeks position, preferably take charge small/medium shop.—Box 4273, "The Builder."

FOREMAN or W/FOREMAN, C. & J., free to be interviewed. Used to all kinds of alterations. Own car, willing to travel. Small or medium-size jobs. —Box 4283, "The Builder."

GENERAL FOREMAN seeks post. C. & J. Willing to travel. Own car. Used to new and alterations. Held post for 35 years. Knowledge of all trades and site records. Free to interview.—Box 4284, "The Builder."

GENERAL FOREMAN, age 55, seeks position London area. Long experience all types Contracts, use Dumpy, handle Sub-Contractors, Setting-out. Good Organiser. Free.—Box 3988, "The Builder."

FEMALE BUILDER'S CLERK Requires change. Nine years present situation. S.E. or S.W. London or Surrey. Salary £600. Fully conversant all aspects of the trade, including Book-keeping and Costing. Able take charge small office, contracts up to £50,000.—Write Box 4156, "The Builder."

SECRETARY, 12 years' experience in large practice Q.S. with full responsibility, everything other than professional work, seeks change.—Box 4311, "The Builder."

OPPORTUNITY SOUGHT to join small concern based in Southern England and operating in the field of Domestic Development in which unbounded enthusiasm for new ideas, sales experience, surveying qualifications, adaptability and willingness will be of value. Public School education and car driver.—Box 4270, "The Builder."

DECORATOR, PAPERHANGER and COLOURMAN now vacant. Will travel, work all areas.—Write MR. G. T. GAUNT, SNR., 14 Gloucester-way, London, E.C.1.

BUSINESSES

SAWMILL OR JOINERY BUSINESS Wanted, with about two acres of land, West of London.—Box 907, "The Builder."

SMALL BUILDER'S BUSINESS situated in the heart of Kensington. Seven years' lease with vacant flat over; large office ideally situated on busy main street. Turnover approximately £12/15,000.—Box 4316, "The Builder."

Patentee Load Bearing Curtain Walling, any type Cladding, & Stormproof rolling windows would contact reputable Firm to aid Development.

25 years Supervisory Experience, & R.I.B.A. Qualifications.

Principals only.

Box No. 4262 "The Builder"

BROWSE AT THE BUILDER BOOKSHOP

Open Daily - 9 am to 5 pm

4, Catherine Street, Aldwych WC4

PAVE THE WAY FOR HARDER WEAR

For factory and other floors exposed to heavy traffic, impact and corrosion, Accrington 'Nori' Paving Bricks may be specified with the utmost confidence. Made from the same material as the famous Accrington Engineering Bricks. Samples on request.

THE ACCRINGTON BRICK & TILE CO. LTD., ACCRINGTON

Telephone: Accrington 32684

ACCRINGTON 'NORI' PAVING BRICKS

FRANK BATTY & SMITH LTD

BUILDING & CIVIL ENGINEERING CONTRACTORS

LONDON, W.2. PAD 5148, 3088-9 | SOUTH WALES. CARDIFF 22361/2 | ISLE OF WIGHT. RYDE 3322/3.

PLANT and the MEDIUM-SIZED BUILDER

By David Llewellyn

A reprint of articles from

The Builder

4 Catherine St., Aldwych, W.C.2

Telephone: TEMple Bar 6251

3/-

BY POST 3/3

The increasing degree of mechanisation on building sites, large and small, faces every contractor with the problem of how best to organise his plant department to secure the greatest possible efficiency and the least waste of unproductive machine-hours. Mr. Llewellyn writes from the practical viewpoint of a director of a medium-sized firm of builders, who has charge of his company's plant department. What he has to say is practical and helpful, not only to directors of like companies but to their managerial staff and chargehands who are concerned with a branch of the contractor's business which is rapidly becoming a major factor in enabling the smaller builder to secure work at economic prices.

BK. 10

Brelkos CEMENT WATERPROOFER

Brelkos Cement Waterproofer is a fine powder which, when added to cement, makes concrete waterproof. Economical in use, as 3½ lb. is sufficient for 1 cwt. cement.

was used throughout to give added protection

COULSDON, RIDDLESDOWN COUNTY SECONDARY SCHOOL.

County Architect: J. HARRISON A.R.I.B.A.

Main Contractors: C.A.S. (Contractors) Ltd., London, W.8.

Manufactured by PURIMACHOS LIMITED ST. PHILIPS BRISTOL 2.

Also manufacturers of Brella Silicone Waterproofer for use on damp walls.

Please mark page number(s) clearly and add your name, address and profession to ensure that your request can be forwarded without delay to the advertiser(s).

BLOCK LETTERS PLEASE

Readers' Service Form

Reader's Name.....

Address .....

.....

Profession or Trade.....

TECHNICAL REVIEW PAGE—429. Place a tick against the number of the paragraph which interests you 1 2 3 4 5 6

CUT

A.B.C.D. (Raynes Park), Ld. 90
Abelson & Co. (Engs.), Ld. 53
Ableson, L. & D., Ld. 48
A. B. Mould & Construction Co., Ld. 117
Accrington Brick & Tile Co., Ld. 139
Acworth (Plant Hire), Ld. 119
Art Marbles, Stone & Mosaic Co., Ld. 108
Ascot Gas Water Heaters Co. 84
Association of Vermiculite Exfoliators 80
Austins of East Ham, Ld. 114

Babcock & Wilcox, Ld. 24
Bainbridge Bros. (Engs.), Ld. 115
Batley, E., Ld. *436*
Batty, F., & Smith, Ld. 140
Bayliss, E., Ld. *431*
Baynes, F. J., & Co., Ld. 64
Bell & Webster, Ld. 116
Bendz, Ld. 44
Bennett, S., & Son, Flooring, Ld. 121
Boulton & Paul, Ld. 55-94
Boyle, R., & Son 110
Brades Nash Tyzack, Ld. 56
Bradford Glass Co., Ld. 52
Bratt Colbran, Ld. 50
Bridges, S. N., & Co., Ld. 32
British Aluminium, Ld. 87
British Art Tile Co., Ld. 110
British Ceramic Tile Council 42
British Cork Mills, Ld. 105
British Equipment Co., Ld. 58
British Geon, Ld. 61
B.I.E.T. 122
British Plaster Board (Mfg.), Ld. 93
British Werno, Ld. 65
Broad & Co., Ld. *436*
Broughton Moor Green Slate Quarries, Ld. *430*
Brown, N. C., Ld. 48
Brunnings (Holborn), Ld. 118
Burn Brothers (London), Ld. 49
Byrd, A. A., & Co., Ld. 74

Contracts 91
C. & S. Construction Co., Ld. 110
Campbell-Gray, Ld. 115
Canadian Government 12
Carron Co. 33
Carter (Brockley), Ld. 121
Carter Industrials, Ld. 104
Caswell Cranes & Erection, Ld. 120
Cayless Bros., Ld. 117
Central Flooring Co. 120
Chimneys, Ld. 104
City Calculations, Ld. 138
Cloke, Geo. E., Ld. 105
Contractors' Services, Ld. 120
Cope & Co., Ld. 110
Cordar, Ld. 26
Coseley Buildings, Ld. 66
Cox, H., & Sons, Ld. 119
Cox, P., & Partners, Ld. 113
Cox, W. J. (Sales), Ld. 114
Cradle-Scaff, Ld. 104-109-110
Crane, Ld. 20
Crittall Mfg. Co., Ld. 38
Crockatt, W., & Sons, Ld. 43
Croggon & Co., Ld. 105
Crosby & Co., Ld. 49

Dalton, Ballard & Co., Ld. 118
Damp-proofing, Ld. 110
Danaura, Ld. 103
Dandridge, A. F., Ld. 119
De Gay Flooring, Ld. 106
D. R. Illuminations, Ld. 54
Duresco Products, Ld. 31

Econa Modern Products, Ld. 59
Edgington, Benjamin 118
Elgood, E. J., Ld. 106-107
English Joinery Mfrs. Assoc. (Inc.) 27-28-29
Essex Steel Scaffolding Co., Ld. *436*
Evode, Ld. 3

Excel Asphalte Co., Ld. 103
Expandite, Ld. 103-105-109-121

Falkus Bros., Ld. 70
Farr, Edward, Ld. 109
Farrar, E., Ld. 108
FEB (G. B.), Ld. 7-9
Federation of Master Builders *436*
Ferodo, Ld. 8
Finlock Gutters, Ld. 43
Floor Treatments, Ld. 88
Fluid Glass Products, Ld. 105
Ford & Walton, Ld. 65
Furse, W. J., & Co., Ld. 109

G.C. Construction Flooring Co., Ld. 106
Gibson, A. L., & Co., Ld. 88
GKN Reinforcements, Ld. 80A
Gray, Geo. E., Ld. 21
Greenwich Pump & Plant Co., Ld. 118-119
Grey, C. C. 105
Gypsum Mines, Ld. 56

Hammond & Champness, Ld. 18
Harris & Bailey, Ld. 118
Harvey, G. A., & Co. (London), Ld. 35
Haywards, Ld. 22
Higgs & Hill, Ld. 37
Hirschhorn, E., & Co., Ld. 103
HMSO 45
Holland & Hannen and Cubitts, Ld. 62-63
Holt, B., Ld. 105
Hook's Joinery Works, Ld. 121
Hope, H., & Sons, Ld. 73
Housden, G. & H. 121
Hubbuck, T., & Son, Ld. 44
Hy-Rib Division, Truscon, Ld. 110

Ibstock Brick & Tile Co., Ld. 23
Ivanhoe Fencing Co., Ld. 105

Jablo Plastics Industries, Ld. 113
James Joinery 121
Johnson, C. H. (Mach.), Ld. 115
Jones, T. C., & Co., Ld. 34

Kay & Co. (Engineers), Ld. 45
Kenroy, Ld. 118
Key Engineering Co., Ld. 40-41
King, Geo. W., Ld. 48
King, J. A., & Co., Ld. 46
Kleine Co., Ld. 83

Lakeland Green Slate & Stone Co., Ld. 14
Leander Products, Ld. 105
Leca (Great Britain), Ld. 80B
Lesser, J. E., & Sons, Ld. 117
Lester, A. S., Ld. 58
Lever, J., & Sons, Ld. 117
Lewis & Lewis, Ld. 118
Lillington, G., & Co., Ld. 4-10-110
Liner Con. Mach. Co., Ld. 58-85
Lockwood, R. W. 120
London Flooring Co. 105
Luxfer, Ld. 108
Lytag, Ld. 77

Macnamara, J., & Co., Ld. 118-119-120
Manger, J., & Son 116
Marley Concrete, Ld. 85-117
Marley Tile Co. 67-72
Martyn, B., Ld. 105
Massey-Ferguson 89
Maxwell, A., Division 46
McNeill, F., & Co., Ld. 90
Mills Scaffold Co., Ld. *Back Cover*
Minnesota Mining & Mfg. Co., Ld. 86
Mint, Birmingham, Ld., The 64
Minton Hollins, Ld. 108
Mitchell Bros., Ld. 116
Moffats, Ld. 47
Moore's Plant, Ld. 119-120
Mullen & Lumsden, Ld. 68

Nelson & Co. (Joinery), Ld. 121
New Stone & Restoration, Ld. 109
Nicoll, Dawson & Humphries, Ld. 104-109-120

Nu-Way Heating Plants, Ld. *432*

Oddi Asphalte 103
Odoni, A. A., & Co., Ld. 54
Orlit, Ld. 106

Palmers Trav. Cradle & Scaff. Co., Ld. 105-109-110
Paramount Asphalte, Ld. 103
Parkinson, E. (London), Ld. 109
Peel, H., Ld. 88
Pilkington Bros., Ld. 36
Plantire, Ld. 120
Plycol, Ld. *Cover*
Podmore Works, Ld. 117-118
Pollock Bros. (London), Ld. 108
Portable Concrete Buildings, Ld. 114
Powell Duffryn Timber Inds., Ld. 6
Previte & Co., Ld. 103
Protim, Ld. 55
Purimachos, Ld. 140

R. C. (Steel), Ld. 121
Reid, J., & Sons, Ld. 107
Richardson, P. C., & Co. (M'brough), Ld. 103
Rippers, Ld. *Inside Back Cover*
Rose, J. D. (Exhibitions), Ld. 57

Sadd, J., & Sons, Ld. 51
Salter, Edwards & Co., Ld. 103
Sealocrete Products, Ld. 112
Searle Products, Ld. 39
Secomastic, Ld. 107
Security Scaffolds, Ld. 110
Semtex, Ld. 81
Shapland & Petter, Ld. 106
Shot Blasting & Metal Spraying Co., Ld. 121
Simpson, A. F., Ld. 117-118
Sitefinders, Ld. 122
Site Survey Co. 138
Skinner, W. A., & Co., Ld. 105
Skirden Products, Ld. 76
Sloggetts (Plant Hire), 120
Smith, H. V., & Co., Ld. 103
Southern Asphalt, Ld. 103
Spencer, Lock & Co., Ld. *435*
Standard Range & Foundry Co., Ld. 2
Stephens & Carter, Ld. 104-107-109-120
Stevens & Adams, Ld. *436*
Stubbs, J. (Marble & Quarzite), Ld. *433*
Super Silent, Ld. 13
Swedish Perstorp 15
Symes (Plant), Ld. 119

Taylor, J. (Syston), Ld. 118
Taylor, W. (Belmont), Ld. 121
Templex Holdings, Ld. 85
Thermalon, Ld. 16-17
Thorn, J., & Sons, Ld. 52
Thornton, Wm., & Sons, Ld. 106
Tibbetts, W., & Sons, Ld. 57
Tile Floors (Ind.), Ld. 45
Tomo Trading Co., Ld. 110
Topping & Leggat 103
T.P. Polyplastic Converters, Ld. 116
Tradex Meter Co., Ld. 117
Travis & Arnold, Ld. 19
Tretol, Ld. 5
Tretol Associated Prods., Ld. 11
Trianco, Ld. 14
Truscon, Ld. 71
Tunnel Portland Cement 78

Unistrut Div. of Sankey-Sheldon, Ld. 79

Valor Co., Ld. 75
Vauxhall Motors, Ld. 60

Wachal Flooring Co. 120
Wade Wilton, E., & Son 104
Walley (Thurrock), Ld. 108
Ward Bros. (Sherburn), Ld. 25
Welsh Tinplate & Metal Stamping Co., Ld. 69
Wernick, S., & Sons, Ld. 80B
Whitlock Bros., Ld. 30
Winget Services, Ld. 119
Woolliscroft, G., & Son, Ld. 62

Advertisers' Index

IN YOUR OWN INTERESTS COUPONS IN ADVERTISEMENTS SHOULD BE SENT DIRECT TO THE ADVERTISER

TUCK IN

The Builder Readers' Service Form

FIRST FOLD

LAST FOLD

If you would like more information regarding any of the products mentioned in this issue please tick index, detach the whole of this page, fold and post as indicated.

Postage will be paid by The Builder Ltd.

No Postage Stamp necessary if posted in Great Britain or Northern Ireland

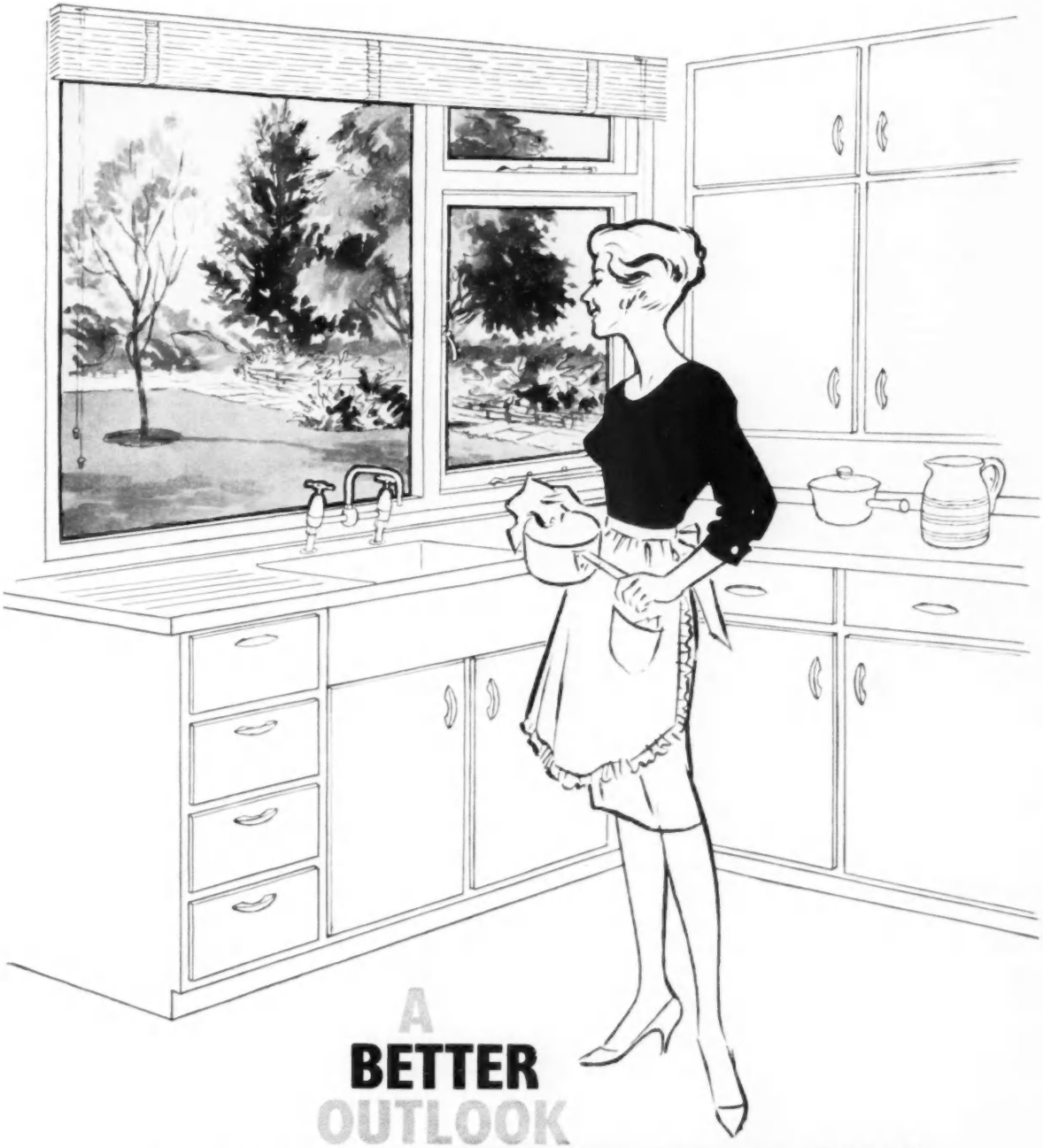
BUSINESS REPLY SERVICE
Licence No. WC1799

THE BUILDER LIMITED,
READERS' ENQUIRY SERVICE,
4, CATHERINE STREET,
LONDON, W.C.2

CUT

SECOND FOLD

FIRST FOLD



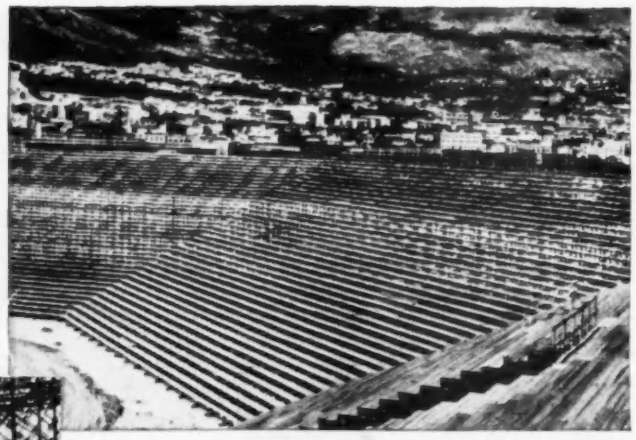
A BETTER OUTLOOK THROUGH RIPPER WINDOWS

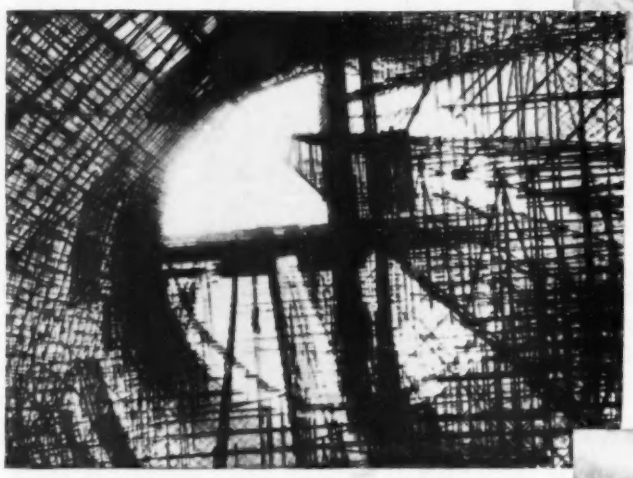
Write today for our free catalogue of standard windows, doors, external and internal door frames, linings and kitchen units, to Dept. B. 3/3.
Rippers knowledge and experience are at your service.

RIPPER WOODWORK **RIPPERS LIMITED**

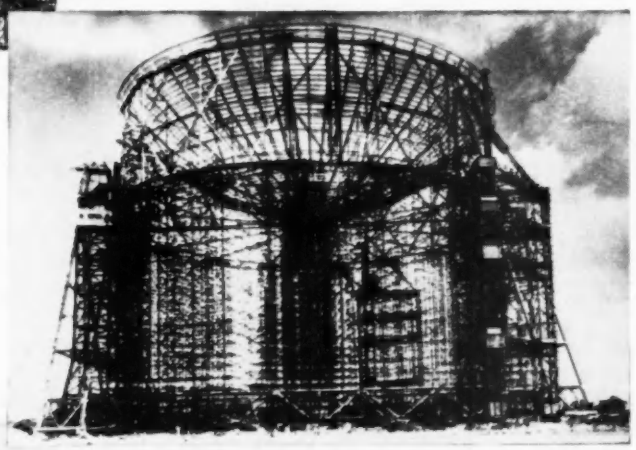
CASTLE HEDINGHAM, HALSTEAD, ESSEX. TELEPHONE : CASTLE HEDINGHAM 191 (4 LINES)
TELEGRAMS : RIPPERS, CASTLE HEDINGHAM
LONDON OFFICE: 9 SOUTHAMPTON PLACE LONDON W.C.1. TELEPHONE: CHANCERY 8306/7

There's no limit

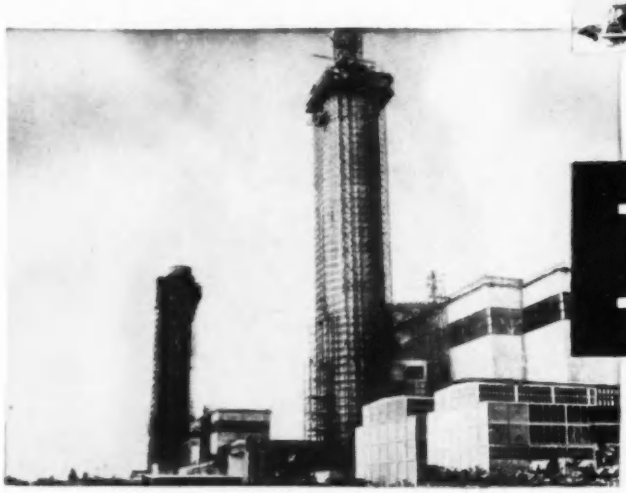




to the support



you can get from



MILLS

MILLS SCAFFOLD CO. LTD., *A subsidiary of Guest, Keen & Nettlefolds, Ltd.*, Head Office: Trussley Works, Hammersmith Grove, London W.6. (RIVerside 3011)

Published by THE BUILDER LIMITED, at the Builder House, Catherine-st., Aldwych, London, W.C.2, England.
Printed by ST. CLEMENTS PRESS LTD., 112, Queen Victoria-st., E.C.4. March 3, 1961. REGISTERED AT THE GENERAL POST OFFICE AS A NEWSPAPER.